CONSTRUCTION NEWS

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RAILWAYS.

(*Denotes that this work is advertised in *Engineering News*.)

New York.—Delaware & Hudson Co. —Double tracking from Binghamton to Harpersville is contemplated. George H. Burgess, Albany, is Ch. Engr.

***Pennsylvania.**—Cumberland Valley R. R.—A contract has been awarded to SUNDSTROM & STRATTON CO., 90 West St., New York, N. Y., for grade revision work on the line through Chambersburg. G. C. Koons, Chambersburg, is Engr.

*Pennsylvania R. R.—A contract for the building of an addition to the Bear Run branch of the Cambria & Clearfield, in Indiana County, has been awarded to A. L. ANDERSON & BROS., Inc., Altoona, Pa.

Alabama.—The Montgomery & Chattanooga R. R.—Surveys have been completed between Alexander City and Montgomery, about 56 miles.

***Mississippi,** The Meridian Deep Water Ry.—The KNICKERBOCKER CONSTRUCTION CO., of Chicago and New York has been awarded a contract to construct and equip a road from Meridian, Miss., to Myrtlewood, Ala. The road is to be completed as far as the Tombigbee River within twelve months and to Maplewood within two years. S. A. Neville is Pres.

Nashville, Lafayette & Eastern R. R. —Announcement has been made that a railroad will be built from Westmoreland, Tenn., to Burnside, Ky., by way of Lafayette, Tompkinsville and Burksville. It is said that the new company will take over the work of the old Monticello & Tatesville Road, which is graded and ready for the ties. The offices are at Nashville.

Tennessee.—Nashville, Lafayette & Eastern R. R.—A new company has been formed and have been granted a charter. R. L. Morris, J. L. Holland, W. H. Whorley are among the incorporators.

Indiana.—Erie R. R.—A site has been purchased near Crown Point for the purpose of building a freight yard having a capacity of 2,000 cars. C. W. Buchholz, 50 Church St., New York, N. Y., is Consult. Engr.

Lake Shore & Michigan Southern Ry. —Track elevation is contemplated in South Bend, to cost about $1,000,000. Samuel Rockwell, Cleveland, Ohio, is Ch. Engr.

Illinois, Chicago, Burlington & Quincy R. R.—An expenditure of nearly $1,000,000 will be made, according to press reports, including a new depot, subways under crossings and track elevation. T. E. Calvert, 209 Adams St., Chicago, Ill.

Iowa.—Twin Falls Ry.—This company has been organized with a capital stock of $500,000 for the purpose of constructing 125 miles of steam and electric roads in the vicinity of Twin Falls. I. B. Perrine, Twin Falls, is interested.

***Arkansas.**—Chicago, Rock Island & Pacific Ry.—A contract has been awarded to the H. C. SHARP CONSTRUCTION CO., Kansas City, Mo., to build a road from Camden to Malvera, about 65 miles. The cost is estimated at $750,000.

Texas.—St. Louis & San Francisco R. R.—Two engineering parties are in the field making surveys for a proposed extension of its Fort Worth & Rio Grande division from Brady to San Antonio, by way of Fredericksburg. Construction work will be started within a few weeks. Whether the road will enter San Antonio over its own track or use that of the San Antonio & Aransas Pass from Waring has not yet been definitely determined. F. G. Jonah, St. Louis, Mo., is Ch. Engr.

International & Great Northern R. R. —The division of the road between San Antonio and Laredo, 150 miles, will be relayed with 85-lb. rail, replacing the present 52-lb. rails. O. H. Crittenden, Palestine, Tex., is Consult. Engr.

Colorado.—Atchison, Topeka & Santa Fe Ry.—W. S. Hodges, Vice-Pres., is in Denver laying plans for the building of sidetracks on its line between Denver and Pueblo, 119 miles. The plans call for sidings, of sufficient length to acccommodate the longest freight train, every five miles. Sidings now in use will be extended and rebuilt, while at numerous points new side tracks of heavy steel will be laid in order to carry out the plan of having long sidings five miles apart. The work will cost $2,000,000.

Arizona.—Southern Pacific.—It is reported work will be started at once on the extension from Globe, Ariz., to Durango, Colo., passing through Western New Mexico. L. H. Long, Tuscon, Ariz., is Ch. Engr.

Washington.—Northern Pacific Ry.—Plans for the construction of the Lake Union belt line in Seattle, to cost $500,000, are nearly ready and work will be started shortly. The company also will shorten the Fremont & Ballard line, build a bascule bridge over the Lake Washington canal and reconstruct a Seattle pier for the Canadian Pacific steamers, these latter improvements to cost $1,100,000. New shops, round houses and terminals at Auburn and Pasco, Wash., will cost $1,100,000, and all the work is to be done during the coming twelve months. W. L. Darling, St. Paul, Minn., is Ch. Engr.

***California.** — Atchison, Topeka & Santa Fe Ry.—Other contracts for grading from Needles to Golls, 31 miles, preparatory to double tracking, have been awarded as follows: H. HAUSER CONTRACTING CO., Los Angeles; C. C. WELSH, Needles, and SHARP & FELLOWS CONTRACTING CO., Los Angeles. See item under this heading Sept. 28.

Western Pacific Ry.—A franchise has been granted to operate a belt line along Martinez St. in San Leonardo. The new road will touch the manufacturing district. T. J. Wyche, Mills Bldg., San Francisco, is Ch. Engr.

*San Diego & Arizona Ry.—A contract has been awarded to ROBERT SHERER & CO., Los Angeles, for grading five and a half miles of roadbed westward from Seedly.

ELECTRIC RAILWAYS.

New York, N. Y.—Under plans approved of by the Public Service Commission the Union Ry., will prolong its line to 230th St. A junction at 225th St. will be made with the Third Ave., system and also with the trolley line to Yonkers. J. D. Kent is Ch. Engr.

Plans are being formed by the New York Central & H. R. R. R. for the elevating of their tracks along Eleventh and Twelfth Aves., and on West St. G. W. Kittridge is Ch. Engr.

Trenton, N. J.—A $300,000 bond issue of the Trenton Street Ry. Co., is to be used for improvements and the betterment of its property.

Summit, N. J.—An ordinance granting a franchise to the Morris County Traction Co., for the extension of its double track trolley road from the present terminus here to the line dividing this city and Chatham was adopted by Common Council recently. J. L. Desch is Ch. Engr. Work will be started at once.

Ellicott City, Md.—The United Rys. & Electric Co., is planning to build an extension from Ellicott City to St. Charles College, about five miles. J. M. Hood, Jr., Continental Trust Bldg., Baltimore, is Ch. Engr.

Norfolk, Va.—It has been announced by officials of the Virginia Passenger and Power Co., that about $1,000,000 will be spent in improving the electric system recently acquired by Frank Jay Gould, the dominating factor in the company. Included in the improvements is the erection of new steel car barns, to cost $125,000; new rolling stock, $50,000, and about $200,000 for a better track system and the erection of up-to-date terminals at Ocean View and Willoughby Beach. Noted May 4 under Petersburg, Va.

Morgantown, W. Va.—The Monongalia & Marion Ry. Co., has been formed with a capital of $50,000 to construct an electric railway from Fairmont to Morgantown. John Madigan, Morgantown is one of the incorporators.

Rome, Ga.—The East Rome Gasoline Railway, has made application for a charter to build a 3-mile railway in Rome and East Rome. It is the intention of the company to use gasoline motor cars. The capital is $50,000.

Yazoo City, Miss.—A railway is contemplated by a group of men now forming a company, for the purpose of connecting Yazoo City and Canton. Among those interested are I. S. Reed. H. H. Brickell, H. Wise, D. A. Swayze and T. H. Campbell, all of this city.

***New Iberia, La.**—The Iberia, St. Mary & Eastern Ry. Co., has awarded a contract to L. M. LINNAN, Baton Rouge, for grading in connection with a railway from New Iberia along the right-of-way of the Southern Pacific Ry. to Oliver Station, thence to Jeanerette, Charenton, Franklin and Berwick. It is planned to operate gasoline motor cars. F. M. Welsh, is Pres.

Memphis, Tenn.—The West Tennessee Traction Co., capitalized at $100,000, has applied for a charter to build an electric line from Memphis to Jackson and thence to Nashville. A. G. Riley is interested in the project.

Nashville, Tenn.—Application for a charter has been made by the West Tennessee Traction Co. Work on the proposition of building the interurban from Memphis to Jackson and thence to Nashville will begin very shortly.

***Shelbyville, Tenn.**—The Middle Tennessee Traction Co., Nashville, has awarded a contract to McLAUGHLIN & CO., Franklin, for grading on the proposed line between Shelbyville and Franklin by way of College Grove, about 40 miles. About six miles of the line has been graded, John Wilkes, 2 Berry Block, Nashville, is Ch. Engr.

Hickman, Ky.—A $4,000,000 project is being planned by the Kentucky Southwestern Ry., Electric Light & Power Co. It is proposed to build an electric Ry. from Paducah toward Hickman and it will also construct a belt line to run from near Milburn to Lovelaceville and from there through Blandville back to Paducah.

Evansville, Ind. — The Evansville, Chrisney & Eastern Traction Co., has made arrangements to commence the construction of an interurban road, connecting Lynnville and Chrisney with Evansville. This line has been projected about a year and substantial subsidies have been voted in aid of constructing the road.

Indianapolis, Ind. — The Indiana Union Traction Co., is required to remove its tracks from Southerland Ave. and build an entrance into the city by way of Martinsdale Ave., or the Fair Ground. The change to either route President Brady says will require an expenditure of $200,000.

Indianapolis, Ind. — The American Traction Power Co. has been formed here for the purpose of organizing, financing, constructing and operating electric railroads and power companies in the South.

Richmond, Ind.—Sharon E. Jones, president of the recently incorporated Richmond & Eastern Traction Co., announces that the directors will be able to finance and construct that portion of the road between Richmond and Portland this year. Work will be started in the spring.

Gary, Ind.—Application has been made here for a franchise for the Indianapolis, Chicago & Meridian Traction Co. The officials of the company announce that they expect to let contracts for the construction of the road involving an expenditure of $6,000,000.

***Milwaukee, Wis.**—The Milwaukee Western Electric Ry., has awarded the first grading contract to P. J. FINNERTY, Oconomowoc, Wis., for the construction of a line into Central Wisconsin.

***Des Moines, Iowa.**—The J. W. TURNER CONSTRUCTION Co., was awarded contracts amounting to $43,000, which call for the construction of an addition to the power plant. Work on a 2,500 ton capacity coal bin and the construction of a new intake system from the river. These contracts let by the Des Moines City Ry. Co., are part of the plans for improving the road. J. E. Welsh is Ch. Engr.

Salt Lake City, Utah.—Geo. M. Cannon of this city is interested in the plans for the construction of an electric line, from Salt Lake City to Provo and Payson.

***Eugene, Ore.**—The contract for the road construction of its proposed Ry. from Eugene to Corvallis has been awarded to WILLIAM CASE by the Portland, Eugene & Eastern Ry. Co.

Spokane, Wash.—The Spokane & Inland Empire Ry. Co. will build the North Howard street car line to the city limits. Supt. F. C. Farr has charge of the construction and work will be finished by Dec. 1.

Portland, Ore.—A company has been organized by Chicago capitalists, to construct an electric line from Vancouver Wash., to the South Fork of the Lewis River, and then northeast to Kilckevat Pass, a distance of 100 miles. In addition to the electric line the company will operate coal mines, sawmills and townsite properties. H. L. Harmon is promoting the enterprise.

Los Angeles, Cal.—Bion J. Arnold, Consulting Engineer, 105 So La Salle St., Chicago, has selected Plaza as depot site and recommends that steam road passenger traffic be concentrated in Union depot.

It is reported that the Los Angeles Ry., is considering an issue of bonds to the amount of $2,500,000 to provide funds for extensions and improvements to its system.

The Pacific Electric Co., George E. Pellsbury Ch. Engr., has received permission from the Board of Supervisors to construct a two mile cut-off on the line from this city to Pasadena. A tunnel about 1,500 ft. long will probably be required.

A franchise has been granted to the Pacific Electric Ry. Co., by the County Supervisors to construct an electric railway from Schuetzen Park to a connection with the present South Pasadena system.

National City, Cal.—Ties will be relaid and new 65 lb. rails will be used to improve the electric division of the San Diego Southern Ry. between National City and San Diego. J. D. Spreckels, San Francisco is Pres.

***Oakland, Cal.**—A contract has been awarded for the construction of a proposed railway from Oakland to Walnut Creek to the SHATTUCK-EDINGER CO., by the Oakland & Antioch Electric Ry. Co.

Ontario, Cal.—The Ontario & San Antonio Heights R. R. Co., is planning to build an extension from Cucamonga to Upland and probably will extend to Etiwanda and San Bernardino. William G. Kerckhoff, 624 Pacific Electric Bldg., Los Angeles, is Vice-Pres. and Gen. Mgr.

Quincy, Cal.—G. H. Goodhue of Indian Falls is considering plans for the construction of an electric railway to extend from Indian Falls, near Quincy, to a junction with the Western Pacific R. R. in Indian Valley.

Redlands, Cal.—The University of Redlands and others will construct a railway line from this city to the University grounds a distance of four miles. The cost is estimated at $20,000.

San Jose, Cal.—C. P. Andrews has made application to the board of Supervisors, for an electric railway from San Jose to New Almaden, a distance of about 11 miles.

San Rafael, Cal.—The California Terminal Co., Fairfield, has filed incorporation papers in the office of the County Clerk, proposes constructing a railway from San Rafael to Sacramento, passing through Marin, Sonoma, Napa, Solano, Yola and Sacramento Counties, about 95 miles. The incorporators are C. W. Coulisk, W. M. Rank and R. A. Morton.

San Francisco, Cal.—The Board of Pub. Wks., will receive bids up to 3 p. m., on Nov. 1, for furnishing and delivering 43 double end pay-as-you enter type, closed steel motor cars, complete. Four extra trucks, complete with axles, wheels and motors, for the Geary St. Municipal R. R.

The California Terminal Co., has made application for a charter to build a 95 mile electric railway between this city and Sacramento with an 18 mile branch extending into Petaluma and a 5 mile branch into Numa.

Toronto, Ont.—Bids will be received until Oct. 18, by G. R. Geary, Chn. Bd. of Control, Toronto, for the following overhead and line material: No. 2-0 trolley wire; feeder wire; steel tubular poles; span wire, hangers, ears, insulators, etc. Specifications may be obtained on application to Department Railways & Bridges, City Hall, Toronto.

***Vancouver, B. C.**—The British Columbia Electric Ry. Co., has awarded a contract to the MOORE & PETHICK CO. for grading 18 miles of line from Victoria through the Saanich peninsula to be completed within twelve months. The Saanich extension on Vancouver Island will be 22 miles in length, connecting Victoria with Deep Bay on the west shore of the Saanich peninsula near its northern point. Noted March 16.

LIGHT AND POWER PLANTS.

(*Denotes that this work is advertised in *Engineering News*.)

Clarendon, Vt.—The Rutland Ry., Light & Power Co., is planning to build a a new power house and an arch dam, 96 ft. high of reinforced concrete, at Clarendon Gorge. The power station will be about 40 × 20 ft. One 500-KW. turbine and a 1,000-HP. water wheel will be installed. J. Loftus, 28 Center St., Rutland is Ch. Engr.

Chicopee, Mass.—A plan to improve the municipal electric light plant is under consideration. An estimate of $96,000 has been made by C. W. Whiting, Boston.

Littleton, Mass.—Bonds have been authorized for the erection of an electric light plant and water-works. The cost is estimated at $65,000.

North Brookfield, Mass.—An electric power plant will be installed at the Oxford Linen Mills. Benjamin C. Mudge is Treas.

North Brookfield, Mass.—The Oxford Linen Mills are about to construct a power house costing $25,000. Benjamin C. Mudge is Treasurer.

Wallingford, Conn.—All bids submitted for the construction of the addition to the electric-light plant were rejected by the Board of Electrical Commissioners.

New York, N. Y.—See item under Water Supply—Irrigation.

***Silver Springs, N. Y.**—A contract for furnishing electrical equipment for the proposed municipal electric-light plant, including generator, exciter, switchboard, etc., also wiring streets, has been awarded to the GENERAL ELECTRIC CO., Schenectady, N. Y.

✚Princeton, N. J.—A contract has been awarded to JOHN L. REID, Newark, N. J., at $28,987, for the construction of a conduit system and piping in power house in connection with the construction of the graduate school at Princeton University.

✚Morristown, N. J.—The Morris & Somerset Electric Co. awarded contracts as follows: ALLIS-CHALMERS CO., Milwaukee, Wis., one 350-HP Babcock & Wilcox boiler, one 25-KW generator and one 750-KW, 2300-volt steam turbo-generator set; C. H. WHEELER MFG. CO., Philadelphia, Pa., surface condenser and pumps; WESTINGHOUSE ELECTRIC & MFG. CO., Pittsburgh, Pa., switchboard and transformers.

Spring City, Pa.—The lowest bid for the power house and laundry to be built at the Pennsylvania Institution for Feeble Minded and Epileptics, was submitted by John R. Wiggins & Co., $233,859.

Washington, D. C.—Bids will be received by James Knox Taylor, Superv. Archt., Washington, D. C., until Oct. 21, for furnishing and installing lighting fixtures in the U. S. building at Brookhaven, Miss.; Lexington, N. C.; Milledgeville, Ga.; Mt. Sterling, Ky.; Waxahachie, Tex.; Waycross, Ga.; Big Stone Gap, Va.; Shreveport, La.; and Port Arthur, Tex.

Danville, Va.—Contracts for the construction of the municipal electric light plant will probably be awarded about Oct. 25. The cost is estimated at $125,000. Frank Talbot, is Mgr. Noted, Sept. 7.

✚Rutherfordton, N. C.—A contract has been awarded to the CAROLINA ELECTRICAL CO., Raleigh, for supplies and equipment for the electric light plant.

✚Troy, Ala.—A contract has been awarded to J. L. McGEHEE and M. T. MAXWELL, of Tuscaloosa, Ala., by the Pea River Power Co. to construct power plant in Coffee County to supply power to Troy, Dothan and several other cities. The cost is estimated at $150,000. A dam 25 ft. high and power house will be built. Charles Henderson, Troy, is in charge of the plant.

Mansfield, La.—W. D. McCormack, has recently been granted a franchise to lay a natural gas distributing system and will begin work at once.

***London, Ky.**—Bids will be received at the office of the Supervising Architect, Treasury Dept., Washington, D. C., until 3 p. m., on Oct. 25, for one gas engine and electric generator, etc., in the United States post-office at London. Specifications may be had at the office of James Knox Taylor, Superv. Arch.

Lima, Ohio.—All bids were rejected on Sept. 15 by George E. Whitney, Secy. of Comn. and revised plans and specifications will be ready about Oct. 16 for 1,600 HP. water-tube boilers, in 200 HP. units; six engines; six generators; an 11-panel switchboard; pumps and pipe. F. L. Packard, 1214 New Hayden Bldg., Columbus, is Arch.

Columbus, Ind.—The City Council will soon ask for bids for the furnishing and installating an ornamental cluster lighting system, in the business section.

Kentland, Ind.—An electric light and power plant is projected. A franchise has been granted to R. W. Howard.

✚South Bend, Ind.—The Michigan & Indiana Electric Co., has awarded a contract to the ROCHESTER BRIDGE WORKS, Rochester, Ind., for the structural steel for its new power plant, amounting to about $40,000. Half the structure will be built to let the electric company move its machinery in and then tear down the remaining part and build the new structure in its place completing the whole within 60 days.

Battle Creek, Mich.—A power plant for heating and lighting purposes also an ice plant will be installed in the new building to be erected by C. W. Post on Jackson St.

Baraga, Mich.—See item under Water Supply-Irrigation.

Lansing, Mich.—The State Railroad Commission has approved plans for the Consolidated Power & Light Co., Detroit, for an extensive water-power system, including the construction of five dams to supply power for a high-tension electric transmission, system. The company proposes to operate in Clare, Midland, Ionia, Belding, St. Johns, Alma, St. Louis and Saginaw. Bond of $500,000 has been authorized. J. L. Hudson is Pres. and C. L. Abbott is Vice-Pres. and Mgr.

✚Quincy, Ill.—A contract has been awarded by the Electric & Heating Co. to the J. W. TURNER CONSTRUCTION CO., Des Moines, Iowa, for placing its wires underground.

Saint Joseph, Ill.—A 30-year franchise to operate an electric light plant has been granted to the Central Illinois Electric Co., also a contract to light the street of the city for a period of ten years, has been awarded.

Columbus Junction, Iowa.—An electric plant is bein considered. R. D. Parks, Lake Crystal, Minn., is interested.

Deep River, Iowa.—A municipal electric light plant is contemplated.

✚Des Moines, Iowa.—A contract has been awarded to the McDONNELL IRON WORKS, Des Moines, for ornamental lamp standards for cluster lamps on West Seventh St.

Chapman, Kan.—A bond issue of $25,000 will be made, it is stated, to be used for the erection of a municipal electric light plant.

Fort Leavenworth, Kan.—Bids will be received by Capt. F. W. Van Duyne, Q. M., U. S. A., Military Prison, Fort Leavenworth, until Oct. 25 for furnishing 950 ft. lead sheet cable, 750,000 c. m. 2-circuit breakers, 12 wrought copper terminals, a recording wattmeter, etc.

Glasco, Kan.—The Concordia Electric Light Co., will rebuild its transmission line between Glasco and Concordia to transmit 33,000 volts.

Glasco, Kan.—See item under Water Supply-Irrigation.

✚Kansas City, Kan.—A contract has been awarded to J. W. FERGUSON CONSTRUCTION CO., at $23,669, for the construction of the power station and boiler house for the proposed municipal electric light plant. The ALPINE CONSTRUCTION CO., was awarded the contract for the construction of the foundations for both buildings, at $9,984.

Specifications have been adopted for a steam plant and electrical machinery to be installed in the new municipal electric light plant. This work will cost about $137,000. Stevens & McLaughlin, Room 507, Reliance Bldg., Kansas City, are the Engrs., James A. Cable, is Comr. of Water and Light. Noted on June 29.

Sylvan Grove, Kan.—See item under Water Supply-Irrigation.

Nevada, Mo.—The Gunn Pipe Line Co., Kansas City, Mo., has been authorized to use $50,000 stock for the installation of gas supply equipment.

Paragould, Ark.—The municipal electric light plant will be improved by the expenditure of $30,000.

Del Rio, Tex.—D. B. Chapin and associates are preparing to build a dam across Devil's River to be 185 ft. high, to obtain a water supply for irrigating about 150,000 acres of land and to operate a hydroelectric plant. Surveys have been made.

Austin, Tex.—See item under Water Supply—Irrigation.

Cuero, Tex.—The Cuero Electric Light Co. is installing new machinery at its power plant and making other improvements.

Guffey, Tex.—The Beaumont Ice, Light & Refrigerating Co. is extending its electric transmission system to the oil field adjacent to Guffey, and motors will be installed at the different wells and pumping done by electric power.

Harlingen, Tex.—See item under Water Supply—Irrigation.

Waco, Tex.—The city commissioners will soon take steps towards installing a municipal electric light plant. Bonds to the amount of $250,000 have been issued for the purpose and negotiations were pending between the city and the Waco Gas & Electric Co. relative to a new lighting contract, but they have been broken off and it is now said that the city will put in its own plant.

✚Collinsville, Okla.—Bonds of $45,000 have been sold to C. A. Rees and the contract for construction of the municipal electric light plant has been awarded to C. A. REES, at $35,000. Benham Engineering Co., 714 Campbell Bldg., Oklahoma City, has charge of the engineering work. Noted Sept. 21 under Wagoner, Okla.

Iola, N. Mex.—B. E. Kern, Deming, N. Mex., and associates are arranging to install a large central electric power plant, pumps and motors for the purpose of furnishing power for irrigating 32,000 acres of land in this section. The project involves the installation of producer gas generators, gas engines, electric generators, 100 pumps of 1,000 gallons capacity each, 100 motors of 25-HP each and 50 miles of transmission lines. The total estimated cost of the improvement is $260,000.

Rodero, N. Mex.—The Virtue Mining Co. will install a hydroelectric plant in Cave Creek canyon, near here, and construct electric transmission lines to farms in San Simon valley for the purpose of affording power for operating irrigation pumping plants. Water power in the canyon will be utilized for generating the initial power.

Ellensburg, Wash.—The Municipal electric-light plant will be improved involving an expenditure of about $30,000. G. M. Miller, Ellensburg, is Engr.

✚Lyle, Wash.—A contract has been awarded to the PUGET SOUND BRIDGE & DREDGING CO., Seattle, for construction of a dam on the Klickitat River in connection with its proposed hydroelectric power plant by the Northwestern Electric Co., Portland, Ore.

Lebanon, Ore.—The Lebanon Lumber Co. is preparing plans for an electric power plant to supply electricity for lamps and motors at its mill.

McKinnville, Ore.—A plan is under consideration to install an ornamental street-lighting system in the business district. The wires will be placed underground.

Calexico, Cal.—The city is discussing the installation of a municipal electric light plant. A committee has been appointed to secure an estimate of the cost.

Dorris, Cal.—The Siskiyou Electric Power & Light Co., Yreka, Cal., has made application for a 50-year franchise to install and operate an electric system.

Folsom, Cal.—The Pacific Gas & Electric Co. will construct a power line from Folsom to Roseville in the near future. G. C. Holburton, 445 Sutter St., San Francisco is Ch. Engr.

✚Fort Miley, Cal.—A contract has been awarded to the McFELL ELECTRIC CO., 201 Sansome St., San Francisco, for installing an electric light system including pole lines, 1,000 lighting fixtures, street lamps, transformers, switch boards, etc., at $17,210.

Fresno, Cal.—The San Joaquin Light & Power Co., is planning to develop hydroelectric power in Big Creek including the construction of three dams and a power plant also the erection of a transmission line from Madera to Gustine.

✚Los Angeles, Cal.—Parkinson & Bergstrom, Archs., Security Bldg., has awarded a contract to the MEYBERG CO., West Sixth St., at $5,650, for furnishing and installing all electric light fixtures in the 11-story Chester Building, at Fifth and Spring Sts.

San Francisco, Cal.—A franchise has been granted to F. G. Baum & Co., Engrs., for a transmission system in Monterey County. About 70 miles will be built.

See item under Electric Railways. Steel cars.

San Jose, Cal.—A franchise has been granted to the Great Western Power Co. for the erection of an electric transmission line. Bids will be received until Nov. 6.

Sutter City, Cal.—The Pacific Gas & Electric Co., is planning to erect a substation to supply electricity for lighting purposes.

Venice, Cal.—The Abbott Kinney Co. owners of Venice will erect a new electric light plant. An expenditure of $100,000 will be made.

Halifax, Nova Scotia.—An addition will be made to the power plant at the Nova Scotia Car Works to double its capacity. The following will be required: One 600 HP. Corliss engine for direct connection to electric generator, three 200 HP. return tubular boilers with self-supporting steel smoke stake five ft. in diameter, 90 ft. high, also feed-water heater, piping and other accessories. Robb Engineering Co., will be in charge.

✚Sarnia, Ont.—The Sarnia Gas & Electric Co. has awarded contracts for its power plant equipment as follows: GOLDIE M'CULLOCH, Galt, Ont., boilers, receivers, piping, a condenser and a mixed-pressure turbo-generator; KILMER, PULLEN & BURNHAM, of the Swedish General Electric Co., 3-phase, 60 cycle generator; CANADIAN GENERAL ELECTRIC CO., switchboard; DEANE STEAM PUMP Co., Holyoke, Mass., pumps; and HENRY WORTHINGTON, New York, N. Y., water weigher.

Toronto, Ont.—See item under Electric Railways.

***Lethbridge, Alta.**—Bids will be received by G. W. Robinson, Secy.-Treasurer, until Nov. 24, for supplying and erecting the following equipment for the power station extension: Section B, boilers and accessories; Section C, mechanical draft and economizers; Section D, steam turbo-generator set and condensing equipment; Section E, steam engine driven exciter; Section G, substation equipment. Plans and specifications can be obtained from Arthur Reid, Supt. Engr., Lethbridge.

✚Victoria, B. C.—A contract has been awarded by a Special Council Comittee to HUTCHINSON BROS. at $5,827 for the installation of cluster lamps on Fort St.

BRIDGES.

(✚Denotes a contract awarded.)

✚Abington, Mass.—Press reports state that a contract for constructing a bridge across Island Grove Pond has been awarded to WILSON C. TOMLINSON, Boston. The bridge will have steel enclosed piers, with iron palings and concrete flooring 12 ft. wide. It will be 300 ft. long, extending from Wilson Pl. to the foot of the memorial arch on the park side. A flight of steps will lead from the bridge to the arch. There will be 15 spans of 20 ft. lengths and the flooring will be 6 ft. above big water.

✚Boston, Mass.—The Boston & Maine R. R. has awarded a contract for three bridges on the Concord Division, requiring 250 tons and for three small bridges at Lynn, Mass., aggregating 270 tons, to the BOSTON BRIDGE WORKS.

✚*Fitchburg, Mass.—We are officially advised that the contract for constructing the Fifth St. Viaduct has been awarded to the McHARG-BARTON CO., 165 Broadway, New York, at $82,529. James H. Fuertes, 140 Nassau St., New York, is Engr. Noted Aug. 31.

***Hartford, Conn.**—See "Proposals."

✚Phoenix, N. Y.—The contract for constructing concrete piers for a reinforced-concrete bridge has been awarded to WALTER BRADLEY & CO., Fulton, N. Y. at $18,000. Noted Aug. 31.

Atlantic City, N. J.—Bids will be received by the Board of Chosen Freeholders until Oct. 11 for [illegible]ning the Albany Ave. bridge, furnishing and driving all piling and constructing the substructure. E. D. Righ[illegible] is County Engr. and Frank [illegible]lin Chn. Bridge Comn.

Jersey City, N. J.—Bids will be received by the Board of Chosen Freeholders of Hudson County until Oct. 5, for constructing two twin culvert reinforced-concrete bridges on the Belleville Turnpike Road between the Newark Turnpike and Saw Mill Creek. Walter O'Mara is Clk. of [illegible]

✚Blairsville, Pa.—Press reports state that a contract for constructing a concrete bridge near Blairsville has been awarded by the County Commissioners to the FERRO CONCRETE CO., Harrisburg, Pa., at $8,145.

✚Clearfield, Pa.—The contract for constructing a concrete [illegible] bridge having two spans of 5[illegible] each, at Coalport, has been awarded by the County Commissioners to [illegible] A. LORD, Hastings, Pa., at $6,776. Noted Sept. 7.

***Reading, Pa.**—Press reports state that the lowest bid received on Sept. 14, by A. L. Rhoads, County Controller, for constructing a reinforced-concrete viaduct on Penn St., was submitted by L. H. Focht, Baer Bldg., Reading, at $325,910. The structure will be 1,350 ft. long and 80 ft. wide, and will be composed of nine 48-ft. arches, five 100-ft. arches and a retaining wall. Noted Aug. 17.

Richmond, Va.—Bids will be received by the Clerk of the Circuit Court at Richmond, until Oct. 9, for constructing a 66-ft. reinforced-concrete bridge, with 12-ft. roadway and reinforced-concrete abutments, or a [illegible]-ft. bridge with 10-ft. roadway and plain concrete substructure. P. St. J. Wilson is State Highway Comr.

Yorktown, Va.—The Hampton & Yorktown Railway Co., Girard Chambers, Ch. Engr., Hampton, Va., will construct three bridges over various streams.

✚Statesville, N. C.—Press reports state that a contract has been awarded to the YORK BRIDGE CO., York, Pa., for constructing a 800-ft. steel bridge over Catawba River at Statesville.

Vicksburg, Miss.—Bids will be received by the city until Oct. 21, for constructing a bridge at Glass Bayou; estimated cost, $10,000 to $12,000. A. M Paxton is City Clk.

✚Barberton, Ohio.—The contract for constructing a bridge for Wolf Creek on the Wooster Road, has been awarded to J. B. WESTHAFER, at $5,600. Noted Sept. 7.

Bellaire, Ohio.—Bids will be received by E. E. Shepherd, County Audr., until 1 p. m., Oct. 10, for constructing a bridge with concrete substructure and steel superstructure, in Mead Township.

Toledo, Ohio.—Bids will be received by the Board of Commissioners of Lucas County until 10 a. m., Oct. 24, for furnishing materials and constructing an automatic swing bridge on County Road No. 555 over the Miami and Erie Canal, in accordance with plans and specifications on file with Chas. J. Sanzenbacher, County Audr.

Cleveland, Ohio.—Bids will be received at the office of the Board of Commissioners of Cuyahoga County until 11 a. m. Oct. 28, for the construction of bridge work, per report No. 2879, concrete bridge, Ridge road, Parma township, in accordance with the form of contract and specifications to be furnished by Frank R. Lander, County Surv. John F. Goldenberg is Clk. Comn.

Cleveland, Ohio.—Bids will be received at the office of the Board of Commissioners of Cuyahoga County until 11 a. m. Nov. 1, for the construction of bridge work per Report No. 2811, Sept. 28, 1900, concrete bridge, Edgerton Road, Royalton Township, in accordance with the form of contract and specifications to be furnished by Frank R. Lander, County Surv. John F. Goldenberg is Clk. Comrs.

✚Youngstown, Ohio.—The contract for constructing the Dewey Ave. bridge has been awarded to the WYMER-HARRIS CONSTRUCTION CO., at $11,000. Noted Sept. 14.

Indianapolis, Ind.—Bids will be received by the Board of County Commissioners until Oct. 7 for constructing a bridge at Sunset Ave., an arch bridge on Bluff Road and three culverts in Perry Township.

Lebanon, Ind.—The Commissioners of Boone County will receive bids until 1 p. m., Oct. 11, for the construction of two and the repair of two bridges in Washington Township. Benjamin F. Henirich is Audr.

Rushville, Ind.—Bids will be received until 2 p. m., Oct. 17, by Commissioners of Rush County for repairing seven bridges. J. M. Stone is Audr.

Washington, Ind.—Bids will be received by Thomas Nugent, County Audr., until 10 a. m., Oct. 7, for constructing two bridges in Harrison Township and three in Barr Township.

✚Valley City, Ill.—Press reports state that the Wabash R. R. Co. has awarded a contract to the MILWAUKEE BRIDGE CO., Milwaukee, Wis., at $40,000, for constructing a steel bridge over the Illinois River at Valley City.

Waterloo, Ill.—Bids will be received by Henry Eisenbarth, County Clk., until 10 a. m., Oct. 7, for constructing a 10-ft. and a 14-ft. reinforced-concrete bridge.

Hibbing, M[illegible]**n.**—The contract for building a 4[illegible]-ft. bridge and trestle to span the W[illegible]ston & Dear tracks at the east end [illegible] Washington St. has been awarde[illegible] to EDWARD GALLAGHER, Dul[illegible] Minn., $4,620. The other bidders [illegible]re Otto Ojaat, Virginia $6,749; Grab[illegible]-Young Co., Hibbing, $5,164; Stone[illegible] Moline, Duluth; $30.50 per 1,000 ft. [illegible] timber in place and 26¾ cts. per [illegible] ft. of piling in place.

Houston, T[illegible]—Bids will be received by Dan C. S[illegible]th, Jr., City Controller, until noon, [illegible]v. 20, for constructing two reinfor[illegible]-concrete bridges over White Oak [illegible]ou. Plans and specifications are [illegible] file with F. L. Dormant, City Engr. [illegible] B. Rice is Mayor.

Houston, T[illegible]—Bids will be received until noon, [illegible] 10, for a creosoted pile-driven bridg[illegible]n the West Reinerman Road. Plans [illegible]d specifications are on file in the o[illegible] of Howe & Wise, First National Ba[illegible] Bldg.

Bartlesvill[illegible] **Okla.**—Bids will be received by th[illegible] Board of Commissioners of Washingt[illegible] County until 5 p. m., Oct. 16, for constructing five bridges in accordance with plans and specifications on file with J. C. Mitchell, County Clk. A. C. Ward is Chn. Comrs.

✚**Newkirk, Okla.**—We are officially advised that the contract for constructing a steel bridge over Chicaskia River was awarded on Sept. 25 to the CANTON BRIDGE CO., Canton, Ohio, at $9,995. Noted Sept. 21.

Wenatchee, Wash.—Bids will be received by the Board of County Commissioners until 10 a. m., Oct. 5, for building a 50-ft. steel bridge with wooden approaches overa dry gulch in Chelan County. Bowerman & McCloy, Central Bldg., Seattle, are County Engrs.

✚**Portland, Ore.**—The contract for the building 140 ft. of steel approach to the Dead Flat-Weiser bridge across the Snake River has been awarded to the COAST BRIDGE CO., Portland, at $9,750.

Portland, Ore.—The sum of $2,000 has been appropriated by the City Council to defray the cost of making soundings and surveys for the bridge to be constructed over the Willamette River in South Portland.

Los Angeles, Cal.—Bids will be received by the Board of Supervisors until 2 p. m., Oct. 16, for constructing a concrete culvert on Base Line Road, San Jose District. H. J. Lelande is County Clk.

Merced, Cal.—Bids will be received by P. J. Thornton, Clk. Bd. of Supervs., until 10 a. m., Oct. 9, for constructing five bridges.

Redwood City, Cal.—Bids will be received by Jos. H. Nash, Clk. Bd. Supervs until 10 a. m., Oct. 16, for constructing a concrete bridge at Schillings and a concrete culvert on Whipple Road.

Ventura, Cal.—Bids will be received by the Board of Supervisors until 10.30 a. m., Oct. 7, for constructing a pile trestle bridge, 255 ft. long. J. B. McCloskey is Clk.

✚**Los Angeles, Cal.**—We are officially advised that the contract for constructing three reinforced-concrete bridges in Ventura County has been awarded to the MERCEREAU BRIDGE & CONSTRUCTION CO., Pacific Electric Bldg., Los Angeles, at $10,870. Other contracts for bridge construction have been awarded to the same firm as follows: Bridge No. 38, across Arroyo Simi south of Moor Park, consisting of two 50-ft. spans, at $6,000; Bridge No. 15, across Todd Barranca, a 40-ft. span, at $4,500; Bridge No. 16, across Adams Canyon Creek, a 24-ft. span, at $2,000.

Contracts have been awarded to PETTERSON & SCHMIDT, Los Angeles, for the construction of reinforced-concrete bridges in Ventura County as follows: Bridge No 26, across Calleguas Creek, three 40-ft. spans, at $5,445; Bridge No. 37, near Ternez Siding, a 24-ft. span, at $1,800. Mayberry & Parker, Pacific Electric Bldg., are Engrs.

Marysville, Cal.—Bids will be received by the Supervisors of Yuba County, until Oct. 7, for the construction of three steel and concrete bridges. Plans and specifications were prepared by F. B. Cook, County Engr.

✚**Red Bluff, Cal.**—The contract for constructing a steel bridge 1,500 ft. long over Battle Creek has been awarded to the PACIFIC CONSTRUCTION CO., 16 California St., San Francisco, at $9,289.

San Diego, Cal.—Bids will be received by the Department of Finance, Ways and Means until 11 a. m., Oct. 16, for the construction of a reinforced-concrete and steel bridge with reinforced-concrete retaining wall at both ends. Percival E. Woods is Supt.

San Jose, Cal.—Bids will be received by the Board of Supervisors until 11 a. m., Oct. 16, for constructing bridges over the east and west crossings of Penetencia Creek, on the Mabury Road.

✚**Turlock, Cal**—We are officially advised that the contract for constructing three highway bridges was awarded on Sept. 25 to HOYT BROS., at $5,529. Noted Sept. 21.

BUILDINGS.

Bangor, Me.—Tentative plans have been accepted by the Public Library Trustees from Peabody & Stearns, Boston, Mass., for a fireproof library, which is to be erected at a cost of $150,000.

Poultney, Vt.—A three-story brick and stone 115x100-ft. dormitory for boys will be built at the Troy Conference Academy at Poultney. M. C. H. Leonard is Chmn. Bd. Trus. The estimated cost is between $55,000 and $60,000.

✚**Athol, Mass.**—James Knox Taylor, Superv. Arch., Treas. Dept., Washington, D. C., has awarded the contract for the construction of a post-office at Athol to the WESTCHESTER ENGINEERING CO., New Yorb, at $47,800.

Brookline, Mass.—An apartment house, to cost $50,000, is to be erected at 180 Winthrop Road for Robert A. Goode. It is to be of brick and stone, three stories high and 104 ft. × 61 ft.

✚**Boston, Mass.**—The general contract for the department store to be erected at the corner of Washington and Summer Sts. for Wm. L. Filene & Sons, has been awarded to WELLS BROS., 366 Fifth Ave., New York. The contract for the structural steel, calling for 5,000 tons, has been awarded to the AMERICAN BRIDGE CO.

A 4-story brick apartment house is to be erected at 1318 Commonwealth Ave., Brighton, for Benjamin Levine, 96 Waumbeck St., Roxbury. It is to be 70 × 66 ft., and contains 22 apartments. F. A. Norcross, 46 Cornhill, is Arch.

Extensive additions for increased office room are about to be made to the South Terminal Station. $500,000 is to be spent in raising the two-story portion on Summer St. to the height of the main building, continuing on Dorchester Ave., to furnish 250 more offices, all to harmonize with the existing structure. Shepley, Rutan & Coolidge, Ames Bldg., are Archs.

A 6-story store and office building is to be erected at 398 Boylston St. for the Henry L. Shaw estate. The estimated cost is $50,000. Luther C. Greenleaf, 101 Tremont St., is Arch.

✚The contract for the residence for Bayard Thayer, 50 State St., to cost $150,000 to $200,000, has been awarded to L. D. WILLCUTT & SONS CO., 146 Summer St. It is to be erected at 83 Beacon St., of stone and brick, six stories, 76 × 49 ft. Ogden Codman, 571 Fifth Ave., New York City, is the Arch.

✚The contract for the 10-story brick mercantile building to be erected at 113 Devonshire St. for the Laurence Minot Estate has been awarded to the GEO. A. FULLER CO., 131 State St. Parker, Thomas & Rice, 131 State St., are Archs.

A 4-story, 99 × 39 ft., brick and stone apartment house, is to be erected at 463 Audubon Road, for Samuel Rudnick, 68 Allen St. F. A. Norcross, 46 Cornhill is Arch.

Holyoke, Mass.—Bids are being received for the building to be erected at the corner of Dwight and Olive Sts. for Treffle Raymond. The structure will be of brick construction and three stories high. Oscar Beauchemin is Arch.

✚**Springfield, Mass.**—The contract for the engine house to be erected at the corner of North and Patton Sts. was awarded to DANIEL C. SHEA for $47,500. The J. J. COTTER CO. has the contract for plumbing and heating and RICHARD A. TURNER & CO. for electrical work. J. L. SHEA has the contract for carpentry work. To be of brick construction and three stories in height. Noted Sept. 28.

✚The contract for the store building at the corner of Main and Vernon Sts. has been awarded to GEO. A. WHITNEY and DANIEL E. BURBANK. To be 109 × 50 ft., two stories. high. H. L. Sprague is Arch.

✚**Worcester, Mass.**—The contract for the erection of the nurses' home at the Grafton colony of the Worcester State Hospital has been awarded to J. P. KEATING, of Westboro. The structure will be 81 ? 35 ft., two stories high and of mill construction. Fuller & Delano Co., Chase Bldg., are Archs. Noted Aug. 24.

The Harrington & Richardson Arms Co. are about to erect a storge building on Abbot St. The structure will be 60 × 60 ft., and two stories high, of brick construction.

Bids will be received at once for the construction of a Masonic Temple to be built on Mower Ave. The building will be 122 × 40 ft., three stories, of tapestry brick, with terrac otta trimmings. Geo. C. Halcott, Supt. of Public Buildings, has the matter in charge.

Hartford, Conn.—Thomas D. Bradstreet, State Comptroller, has advertised for plans for state armories at Willimantic, Danbury and Branford, for which the Legislature has appropriated $50,000. Plans are asked by architects until Nov. 1. Details concerning the proposed work may be obtained by applying to George M. Cole, Adjutant General, Hartford.

•**Albany, N. Y.**—One bid was received by F. B. Ware, State Arch., on Sept. 26, for installing cork tile flooring in the State Education Building, Albany, from David E. Kennedy, 2 West 45th St., New York, N. Y., at $25,750.

Buffalo, N. Y.—Duane Lyman, Arch., Prudential Bldg., has completed plans for a stone, stucco and frame residence to be erected on the Amherst Estates tract, Main St., by Frank L. Bapst, of the German Rock Asphalt Co., 1101-1107 Prudential Bldg. The estimated cost is $40,000.

Buffalo, N. Y.—G. Morton Wolfe, Arch., 638 Ellicott Square Bldg., is preparing plans for a parochial school building, 50 × 175 ft., 3 stories and basement, of brick, stone and structural steel, to be erected at Lafayette Ave. and Grant St. by the R. C. Church of the Annunciation. J. M. McGrath, Lafayette Ave. and Greenwood Place, is pastor. The estimated cost is $60,000.

New York, N. Y.—The new hospital to be erected for the New York Society for the Ruptured and Crippled in East 42d St. will cost $800,000. Plans have been filed by York & Sawyer, Archs.

New York, N. Y.—Plans have been prepared by Warren & Wetmore for a 17-story office building to be erected at 42d St. and Fifth Ave. for the Aeolian Co. The estimated cost is $900,000.

Bids will be received by Joseph Johnson, Fire Comr., until Oct. 10, for furnishing all the labor and materials required for alterations and repairs to the quarters of Engine Co. 147, located on the south side of 16th St., east of 13th Ave., and Engine Co. 137, 55 Morgan Ave., and to Engine Co. 109, 159 Taaffe St.; Engine Co. 130, 59 Ellery St., Borough of Brooklyn.

✚The contract for constructing a stone chapel at 155th St. and Broadway, to be erected by the Trinity Church Corporation, has been awarded to the HOWARD-HAGER CO., at $800,000.

Bids will be received by George McAneny, Pres. Boro. of Manhattan, until Oct. 13, for repairs to the Criminal Court Bldg., at Centre, Franklin and White Sts., Borough of Manhattan.

The Woods-Eltinge-Bloom Theater Co. will erect a 4-story theater and studios at 42d St., near Eighth Ave., at a cost of $77,000. T. W. Lamb is Arch.

Auletta & Co. will erect a 5-story brick tenement at Hoffman and 188th Sts., at a cost of $40,000. Moore & Landseidel are Archs.

Plans have been prepared by D. H. Burnham & Co., Archs., for a 9-story office building to be erected at 42d St., west of Sixth Ave., by the New York Edison Co. The estimated cost is $120,000.

New York, N. Y.—Plans are being prepared by Moore & Landsiedel, 148th St. and Third Ave., for two 5-sty flat buildings to be erected at Vermilyea Ave. and Carmine St., by T. G. Galardi & Co., 30 Emerson St. The estimated cost is $110,000.

Plans have been prepared by Henry B. Herts, Arch., 37 West 31st St., for alterations to buildings at 29 West 46th St. The improvements will cost approximately $40,000.

Plans have been prepared by M. W. Del Gaudio, 401 East Tremont Ave., for a 5-story partment house, 90 × 90 ft. to be erected on Charlotte St., at a cost of $60,000.

The Hope Construction Co., 1037 Teller Ave., will erect two 5-story tenements, 50 × 100 ft. at Park Ave. and 188th st. Plans have been prepared by T. J. Byrne, 3029 Third Ave. The estimated cost, is $120,000.

Plans have been prepared by H. T. Howell, Arch., Third Ave. and 149th St., for a 6-sty office building, with stores, to be erected at 161st St. and Brook Ave. The estimated cost is $90,000.

Plans have been prepared by S. Millman & Son, 1780 Pitkin Ave., for a 4-story tenement building to be erected at Ralph Ave. anr Lincoln Pl., Boro. of Brooklyn. The estimated cost is $40,000.

✚The contract for constructing the 5-story hospital at 303-325 East 42d St., for the New Yorw Society of Ruptured & Crippled, has been awarded to MARC EIDLITZ & SON, 489 Fifth Ave. The estimated cost is $800,000.

Plans have been prepared by J. G. Glover, Arch., 166 State St., Boro. of Brooklyn, for a 7-story brick and concrete storage warehouse to be erected at 105 Horatio St. The estimated cost is $65,000.

Bids will be received by C. B. J. Snyder, Supt. of School Bldgs., until 3 p. m., Oct. 16, for the general construction, etc., of additions to and alterations in Public School 43, on the westerly side of Brown Pl., between 135th and 136th Sts., Boro. of Bronx.

Syracuse, N. Y.—Plans have been prepared by Albert L. Brockway for the construction of a 6-story building to be erected by the Greenway Brewery at West Water St. The estimated cost is $150,000. Martin O'Melia is Pres.

Yonkers, N. Y.—The Court has ordered the Board of Contract & Supply to re-advertise for bids for the erection of a scarlet fever hospital here because of a technical defect in the advertisement. The board had awarded to contract to Lynch & Larkin, of this city. The appropriation for the building is $75,000. James V. Mahoney is Secy.

Plainfield, N. J.—Wilder & White, 156 Fifth Ave., New York, N. Y., are architects for the proposed Carnegie Library. The estimated cost is $100,000. Address Public Library Board.

✚**Vineland, N. J.**—The contract for the construction of a 3-story brick and terra cotta addition, 70 × 40 ft., to the Home for Feeble Minded Women, has been awarded to METZGER & WELLS, Philadelphia, Pa., at $53,400. Noted Aug. 31.

✚**Hoboken, N. J.**—The contract for erecting the addition to the City Hall at Hoboken, has been awarded to PAUL J. EXNER CO., 55 East 20th St., New York, at $114,600.

Gloucester, N. J.—Bids were received on Sept. 28 by James Knox Taylor, Superv. Arch., Treas. Dept., Washington, D. C., on Sept. 28, for the construction of the immigration station at Gloucester as follows: Northeastern Construction Co., New York, $99,202; Guernsey-O'Meara Co., Philadelphia, $88,879; George D. Emery, Philadelphia, $88,888; Newport Contracting & Engineering Co., Newport News, Va., $103,162; Henry E. Baton, Philadelphia, $89,972; Edward F. Fonder, Philadelphia, Pa., $95,967; Cramp & Co., Philadelphia, $88,500. Noted Sept. 21.

Butler, Pa.—All bids received for the construction of the new horticultural building at the State College have been rejected, as they exceeded the $40,000 appropriation. New bids will be received at once. E. E. Sparks is Pres. of Bldg. Com.

Brownsville, Pa.—Bids will be received by A. P. Cooper, Arch., First National Bank Bldg., Uniontown, until Nov. 1, for erecting a brick hospital on Church St. and Fifth Ave., for the Brownsville General Hospital Association. The building is to be 2 and 3 stories high, 112 × 136 ft. The estimated cost is $140,000.

Harrisburg, Pa.—All bids have been rejected by the Building Committee of State College for the erection of the horticultural building, as they exceeded the $40,000 appropriation. New bids will be asked at once. E. W. Parks is Pres.

✚**Mt. Pleasant, Pa.**—Bryce Brothers Glass Co. has let the contract for a $200,000 steel land concrete building to F. H. HURST. The building willl be 220 × 60 ft. and two stories high.

✚**Philadlephia, Pa.**—The contract for erecting the public bath house at Tacony and Levick Sts., 41st Ward, has been awarded to T. G. DOAK & CO., 1421 Chestnut St., at $40,000.

Philadelphia, Pa.—Henry E. Baton is taking estimates for a 12-story apartment house, lat 52 × 130 ft., at 40th and Walnut Sts., for Langham & Co.

Philadelphia, Pa.—Bids will be received by Louis H. Rush, Arch., Chestnut St., for the construction of a 12-story apartment house to be erected at 40th and Walnut Sts.

✚The contract has been awarded to F. A. HAVENS & CO. for a building for the Clark Dining Hall Co., of St. Louis.

Bids will be received by John E. Reyburn, Mayor, until 3 p. m., Oct. 9, for constructing an auditorium in East Fairmount Park. Plans are on file at the office of the Builders' Exchange, 18 South Seventh St., Philadelphia.

Bids will be received by the Building Committee of the Academy of Natural Sciences 1900 Race St., until Oct. 6, for remodeling and repairing buildings. Samuel G. Dixon is Chn.

✚**Pittsburgh, Pa.**—WILLIAM B. BENNETT has been awarded the contract for the erection of a 3-story building at 5th Ave. and De Soto St., Oakland. The cost will be $48,000.

Pittsburgh, Pa.—The Pittsburgh & Lake Erie R. R. Co. is planning the erection of a shelter building to cost $50,000. J. A. Atwood, Pittsburgh, is Ch. Engr.

Reading, Pa.—The Merchants Association is planning the erection of a $100,000 building.

Newark, Del.—The Delaware Historical Society is contemplating the erection of a building to cost $75,000.

Baltimore, Md.—Geo. W. Hyde, 225 E. Baltimore St., has plans and specifications by C. Montgomery Anderson, Arch., for a restaurant at 322-24 N. Howard St. The structure will be of brick construction, 3 stories, slag roof, steam heated, gas and electric lighted. The estimated cost is $100,000. Bids will be received until noon, Oct. 6.

Baltimore, Md.—Archer & Allen, Archs., have prepared plans for a warehouse to be erected on Pratt St. by the Trustees of the John Hopkins Hospital. The estimated cost is $50,000.

✚**Baltimore, Md.**—The contract for an office building for the Maryland Insurance Agency has been awarded to JOS. L. STAFFORD, 48 Herkimer St., Brooklyn, N. Y., at $50,000.

Sykesville, Md.—Jacob Fowble is the lowest bidder for the construction of the Springfield State Hospital Building, at $44,691.

Washington, D. C.—Bids were received as follows on Sept. 28 by the Commissioners of the District of Columbia, Washington, for the construction of (a) school at Burrville, D. C., (b) school on Military Road, D. C., (c) total for both: George E. Wyne, (a) $30,500, (b) $31,500, c() $60,500; Skinker & Garrett, (a) $29,872, (b) $30,673, (c) $60,000; R. T. Humphrey, (a) $32,300, (b) $33,000, (c) $64,000; Burgess & Parsons, (a) $33,200, (b) $32,400, (c) $65,200; Davis Construction Co., (a) $32,879, (b) $33,418, (c) $65,300; Luebkert & Bro., (a) $30,172, (b) $30,900, (c) $61,000; W. E. Mooney, (a) $30,398, (b) $30,584, (c) $60,882.

Bedford City, Va.—Trustees of National Elks' Home are receiving bids on the proposed home to replace the present structure. The building will cost about $260,000. Noted Aug. 24.

Roanoke, Va.—Roanoke Aerie No. 813, Fraternal Order of Eagles, will erect a lodge building of 2 stories with basement and roof garden. The cost is estimated at $40,000. Huggins & Bates, Roanoke, Va., are Archs.

Raleigh, N. C.—The State Bldg. Comn. has approved the plans of P. Thornton Marye, Atlanta, Ga., for the fireproof State Administration building. Bids for the construction are to be received by the State Bldg. Comn. until Nov. 1. The estimated cost is $250,000.

Columbia, S. C.—Plans are being prepared by W. A. Edwards for the 10-story Union National Bank Bldg. to be erected on Gervais and Main Sts. The structure will cost approximately $100,000.

Jacksonville, Fla.—It is reported that all arrangements have been completed by S. N. Kress & Co., for constructing a business building at Adams and Main Sts. The estimated cost is $70,000.

Birmingham, Ala.—It is reported that the members of the Methodist Church are planning the erection of a $50,000 edifice.

✚Birmingham, Ala.—The FRED A. JONES CO. has been awarded the contract for a 20-story office building for the American National Bank. The cost will be $600,000.

Memphis, Tenn.—Plans have been prepared by S. J. Weigal, Memphis, for a 6-story flat building to be erected on Madison Ave. and Dunlap St. by E. R. Parnam & Co. The estimated cost is $150,000.

Norwood, Ohio.—The lowest bid received for constructing the high school building at Norwood was that of Henry Harg, Columbus, at $213,000. Noted Sept. 7.

Cleveland, Ohio.—Bids will be received by the Clerk Board of Education until Oct. 16 for erecting the Memphis School at Memphis and Henritze Sts.

Washington, C. H., Ohio.—The Board of Education will receive bids until Oct. 10 for the erection of a school building. Plans have been prepared by Howards & Marriam, Archs., Columbus.

Cincinnati, Ohio.—Plans have been prepared by Philip Pfeiffer, 10 E. McMillan St., for the stone basement of St. Makin's Church, which is to be erected on St. Makin's Pl. The estimated cost is $40,000.

Cleveland, Ohio.—B. F. Keith, the theatrical man, has announced plans for a million dollar theatre in Euclid Ave., just east of Ninth St.

Columbus, Ohio.—The Commercial Improvement Co., has been organized to erect a six-story office building on Third St., between Long and Gay Sts., on the site owned by J. A. Jeffrey of the Jeffrey Manufacturing Co. Plans for the structure are being prepared by Otto Darst, Arch.

✚Columbus, Ohio.—The contract for a parochial school to be built by the Holy Family church on West Broad St. has been awarded to A. BURKARD, Bexley, at $50,000. The school is to be a fireproof structure.

✚Elyria, Ohio.—The contract for erecting the Y. M. C. A. Bldg., has been awarded to JOHN KAISER & BROS. CO., Elyria, at $64,000.

Kent, Ohio.—Bids will be received by the Board of Trustees of Kent State Normal School at Kent until Oct. 19, for erecting an administration and a dormitory building. Geo. F. Hammond, 409 Lennox Bldg., Cleveland, is Arch.

✚Lorain, Ohio. — The contract for erecting a high school on Washington Ave., has been awarded to the JOHN KAISER & BRO. CO., Elyria, at $52,690, exclusive of heating. H. E. Ford, Honecker Blk., is Arch.

Clinton, Ind.—The Chicago & Eastern Illinois Railroad is preparing to let a contract for the construction of a large freight depot.

Indianapolis, Ind.—C. M. McElvaine, manager of Crane Co., is receiving bids for the erection of an office and warehouse building at West and Market Sts. Estimated cost, $150,000.

F. H. Wheeler has ordered plans to be prepared for the construction of a large flat on Meridian and 32d Sts. The building will be of pressed brick and stone and will contain 42 apartments. The estimated cost is about $1,000,000. Price & McLenahan, Philadelphia, Pa., are Archs.

Gary, Ind.—The Board of Public Works has ordered plans on which to ask for bids for the construction of a joint fire and police station building.

Detroit, Mich.—Maurice R. Marr, Secy of Board of Education, 50 Broadway, will soon be ready for bids on the new W. T. Sampson School, to be located on Beechwood and Begole Aves. The structure will cost about $50,000; Malcomson & Higginbotham are the Archs. 404 Moffat Bldg., and Ammerman, McCall & Anderson, Penobscot Building, are the Engrs.

✚Detroit, Mich.—R. E. Raseman, 1302 Penobscot Bldg., has awarded the contract for the 7-story and basement store building, 75 × 100 ft., for John P. Hemmeter, 32 Hancock Ave E., to JOHN WHITAKER & CO., 51 Church St. The cost is $60,000.

✚Detroit, Mich. — Maurice R. Marr, Secy. of Board of Educaction, 50 Broadway, was awarded the fall contracts for the Hamilton Ave. High School, 2 stories and bacement, 200 × 91 ft., to E. A. CONNELL, 701 Third Ave., for $76,800. Malcomson & Higginbotham, 404 Moffat Bldg., are the Archts., and Ammerman, McColl & Anderson, Penobscot Bldg., are Engrs.

Bay City, Mich.—Bids will be asked soon for the high school addition and manual training buildings, for which an appropriation of $280,000 has been made. Campan & Robinson, Grand Rapids, are Archs.

Kalamazoo, Mich.—Plans are being prepared by Robinson & Campan, 449 Houseman Blk., Grand Rapids, for a 4-story and basement high school, 250 × 70 ft., and 2-story gymnasium, 100 × 104 ft. H. H. Buckhout is Secy. Bd. of Education. The estimated cost is $280,000.

✚Pontiac, Ill.—James Knox Taylor, Superv. Arch., Treas. Dept., Washington, D. C., has awarded contract for the post-office building at Pontiac to JAS. DE VAULT, Canton, Ohio, at $65,044.

Chicago, Ill.—A theater and office building will be erected at Lincoln and Fullerton Aves. by Nicholas Wetzel, Jr., at a cost of $75,000.

Chicago, Ill.—George O. Gordon is contemplating the erection of an apartment house on 39th St. and Ellis Ave. The estimated cost is $150,000.

Englewood (Chicago post-office), **Ill.**—Press reports are to the effect that the Knights of Columbus are planning the erection of a building on Yale Ave. The estimated cost is $75,000.

Highland Park, Ill.—J. F. L. Curtis, of the firm of Clement, Curtis & Co., is contemplating the erection of a $50,000 residence at Laurel Ave. and Lake Michigan.

Madison, Wis.—The construction program of the Board of Regents of the University of Wisconsin for 1912 includes the following described work: Home Economics and University Extension Bldg., $115,000; dormitory for women, $150,000; agricultural chemistry Bldg, $90,000; addition to main chemistry Bldg., $76,000; annex to armory and gymnasium, $150,000; west wing of State Historical Library, $165,000.

Madison, Wis.—The Secretary of the University of Wisconsin will receive bids until Oct. 10 for the entire construction of the superstructure (not including foundations) of the west wing of the Chemistry Building. M. E. McCaffrey is Secy.

North Milwaukee, Wis.—The County Board of Supervisors has adopted the specifications for the proposed new Milwaukee County House of Correction at North Milwaukee, as prepared by Allen D. Conover, Arch. and Engr., Madison. Competitive plans will be called for at once. The estimated cost is $500,000. Noted Aug. 31.

✚The county board of supervisors has awarded the general contract for the construction of the first three units of the proposed $500,000 Milwaukee County School of Agriculture and Domestic Economy to RIESEN & RIESEN, 50 University Bldg., Milwaukee, at $107,800. A. C. Eschweiler, 708 Goldsmith Bldg., is Arch. Noted Sept. 28.

Milwaukee, Wis.—Plans for a 1-story building to be erected by the Second Ward Savings Bank, at Third and Cedar Sts., have been approved by the Building Inspector. The estimated cost is $250,000.

✚Sioux City, Iowa.—The contract for erecting a building for the Bennett Auto Supply Co., at Sixth and Nebraska Sts., has been awarded to LYTLE CONSTRUCTION CO., at $75,000.

✚Forest City, Iowa.—The contract for erecting the addition to Waldorf College has been awarded to CARL BARTLESON, Minot, N. Dak., at $60,000. The structure is to be 44 × 60 ft., of brick and Bedford stone, and 4 stories high.

Wapello, Iowa.—Bids will be received by J. A. Bigger, Secy. Bd. of Education, until Oct. 17, for the construction of a high school. John D. Chubb, 816 Chicago Opera House, Chicago, Ill., is Arch.

Minneapolis, Minn.—Plans are being prepared by Hewitt & Brown for a church which is to be erected at Lyndale and Groveland Aves. S. The estimated cost is $200,000.

St. Paul, Minn.—Bids will soon be called by the St. Paul Lodge of Elks for a club house. James Healy is Exalted Ruler. Ellerbe & Round, 649 Endicott Bldg., are Archs. The cost is estimated at $50,000.

The Board of Regents of the State University received bids Sept. 18 for the construction of additions and alterations to the ladies' dormitory and the dining hall. Hagstrom & Co., Northwestern Bldg., Minneapolis, were the lowest bidders. Noted Sept. 7.

Lincoln, Neb.—Bids will soon be received by the Superintendent of Construction for erecting at the University State Farm a fireproof farm industry building, to cost $85,000.

✚Selby, S. Dak.—The contract for constructing a court house and jail has been awarded to the GRAY CONSTRUCTION CO., Watertown, at $45,039. Other bids were Lepper Construction Co., $51,206; Hintz & Malloy, $54,517.

Sioux Falls, S. Dak.—A 6-story hotel building will be erected on Phillips Ave. by Mrs. Frances Carpenter. The estimated cost is $100,000.

Glendive, Mont.—The North Pacific Beneficial Association has decided to erect a hospital at Glendive to cost approximately $60,000. J. C. Taylor, Glendive, is interested.

Jonesboro, Ark.—Bids will be received by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., until 3 p. m., Nov. 7, for the construction, complete (including plumbing, gas piping, heating apparatus, electric conduits and wiring and interior lighting fixtures) of the U. S. post-office at Jonesboro.

San Antonio, Tex.—Atlee B. Ayers, San Antonio, has been selected by the Governor to prepare the plans and supervise the erection of a new fireproof hospital and other buildings at the Southwestern Insane Asylum at San Antonio. The proposed improvements will cost about $60,000.

Denver, Colo.—It is reported that the members of the Emanuel Congregation are planning the erection of a new synagogue, which will cost $200,000. W. S. Friedman, Pearl and 16th Ave., is interested.

Montrose, Colo.—It is proposed by the members of the Catholic Church to erect a brick edifice which will cost $120,000. F. C. Eberly, Good Blk., Montrose, is Arch. Rev. Chas. Fred. O'Farrell is Pastor.

Phoenix, Ariz.—Press reports are to the effect that plans are being prepared for a depot at Phoenix for the Santa Fe R. R. The approximate cost is $250,000. C. A. Morse, Topeka, Kans., is Ch. Engr.

Spokane, Wash.—Julius Zittel is preparing plans and specifications for the proposed new city hall building. Bids will be received soon. The estimated cost is $500,000.

Portland, Ore.—Plans have been announced by S Benson for the construction of a 12-story, fire-proof building, Seventh and Oak Streets, for Wright Dickson of the Oregon Hotel Co. The building will cost in the neighborhood of $500,000.

✚Portland, Ore.—The contract for constructing the Merchants National Bank Bldg., at Fourth and Washington Sts., has been awarded to LOUIS A. HICKS CO. The estimated cost is $100,000.

A 3-story brick building will be erected on Third and Main Sts. by James W. Cook. The approximate cost is $100,000.

Alameda, Cal.—Plans are being prepared by Smith O'Brien, Arch., Humboldt Bank Bldg., for additions to Our Lady's Home, in Fruitvale, Alameda County. The estimated cost is $50,000.

Alhambra, Cal.—Bids will soon be received by the city for constructing a 1-story school building on Granada Ave. The estimated cost is $40,000. Plans have been prepared by Frederick Noonan, Arch., Los Angeles.

Delano, Cal.—Plans have been completed by A. C. Swartz & Son, Archs., for the erection of a high school building at Delano to cost approximately $42,000. Noted Aug. 17.

✚Los Angeles, Cal.—The contract for constructing a hotel at Beverly Hills has been awarded to the ALTA PLANING MILL CO., Los Angeles. The estimated cost is $200,000. Plans have been prepared by Elmer Grey.

Plans for a 3-story apartment house to be erected on Ingraham St. are being prepared by the Milwaukee Building Co. The structure will cost about $45,000, and will be built by J. E. Murray.

Los Angeles, Cal—The erection of an apartment house at Carondelet street and 7th streets is contemplated by M. Danziger, Los Angeles, at a cost of $125,000.

Longbeach, Cal.—Plans are being prepared by Austin & Sedgwick for constructing a 3-story office and apartment building, 74 × 150 ft., to be erected on Second St. and Pine Ave., by the Mercantile Co. The estimated cost is $60,000.

✚Oakland, Cal.—The contract for the plastering and imitation stone work on the new City Hall has been awarded to A. KNOWLES, Oakland, at $51,000. Noted Sept. 21.

Pasadena, Cal.—Bids will be received by the Board of Education until Oct. 31 for erecting a group of high school buildings. Norman F. Marsh, 212 Broadway, Central Building, Los Angeles, is architect. N. G. Felker is Clerk of Board.

San Diego, Cal.—The Board of Education has accepted the plans of Quayle Bros., Archs., Granger Bldg., for a polytechnic high school. The building will cost $150,000.

San Francisco, Cal.—The Kierman & O'Brien Realty Co. will erect a 5-story reinforced-concrete hotel at Post and Larkin Sts. The structure will cost approximately $55,000.

Plans are being prepared by Elmer Grey, Wright & Callender Bldg., for constructing a church, to be erected on Alvarado St. for the First Church of Christian Scientist. The style of architecture will be classical and the construction will be in masonry. The estimated cost is $100,000.

Plans are being prepared by W. D. Shea, 244 Kearney St., for the construction of a 2-story and basement Class A building, to be erected by the Bank of Italy on Clay St. The estimated cost is $50,000.

Plans are being prepared by Henry C. Smith, Humboldt Bank Bldg., for a 6-story reinforced-concrete apartment house, to be erected on Leavenworth St. The exterior finish will be in white cement plaster. The estimated cost is $75,000.

Santa Monica, Cal.—Claude Rogers and associates have purchased a 1,000-ft. strip of land at North Beach. The old bath house and other buildings will be razed and new bath houses and similar structures constructed. The Ocean Front Promenade will be extended to California Ave. The improvements will cost $100,000.

✚San Jose, Cal.—The contract for erecting the training school at the State Normal School at San Jose has been awarded to ROBERT TROST, San Francisco, at $52,000.

Quebec, Que.—Bids will be received by R. C. Desrochers, Secy. Pub. Wks. Dept., Ottawa, until Oct. 11, for the construction of an immigration building on Princess Louise dock. Plans and specifications may be obtained on application to A. R. Decary, Dist. Engr., Quebec, or H. N. Lymburner, Supt. of Pub. Bldgs., Montreal.

Quebec, Que.—Bids will be received by R. C. Desrochers, Secretary Public Works Department, Ottawa, until Oct. 17 for the construction of a reception building at Savard Park. Plans, specifications and form of contract can be obtained on application to A. R. Decary, Dist. Engr., Quebec or H. N. Lymburner, Supt. Pub. Bldgs., Montreal

Athens, Ont.—Bids will be received by R. C. Desrochers, Secy. Pub. Wks. Dept., Ottawa, until Oct. 5 for the construction of a public building. Plans and specifications may be obtained on application to Thos. A. Hastings, Postal Station "F," Toronto.

Wallaceburg, Ont.—Bids will be received by R. C. Desrochers, Secy. Pub. Wks. Dept., Ottawa, until Oct. 10, for the construction of a public building. Plans and specifications may be obtained at the office of H. J. Lamb, Dist. Engr., London, post-office Wallaceburg.

✚Winnipeg, Man.—It is reported that the Great Northern Ry. Co. has awarded the contract for the construction of a new freight house at Winnipeg to the J. McDAIRMID CO., Winnipeg. It will be 400 × 100, of brick and concrete. Cost, $75,000.

Vancouver, B. C.—Plans are being prepared by Quandt & Creutzer, Haight Bldg., Seattle, Wash., for a 6-story brick and concrete apartment house for H. M. Cuttingham at a cost of $125,000.

Victoria, B. C.—Thomas Ashe has been awarded the contract for the erection of a store building at the corner of Bandora Avenue and Cod street. The cost will be $40,000.

Regina, Sask.—Press reports are to the effect that plans are to be prepared at once for erecting a ladies' college in connection with the Regina Methodist College. The cost is estimated at $200,000.

WATER SUPPLY—IRRIGATION.

Pittsfield, Mass.—The Board of Public Works has estimated the cost of extending the water main in East St. to the junction, at $5,700.

Fishkill Landing, N. Y.—On Sept. 27 the village voted to extend the water mains.

***New York, N. Y.**—Bids were received by the Board of Water Supply, New York, on Sept. 26, as follows: For Contract 113, for test pits and borings on the site of the proposed Silver Lake Reservoir, situated about one-half mile west of Tompkinsville and about two miles by trolley from St. George Ferry, Staten Island, Boro. Richmond: Sweeney & Gray Co., Long Island City (L. I.), N. Y., $4,745; Sprague & Henwood, Inc., Scranton, Pa., $6,667; Healey Contracting Co., New York, $7,150; Grant Rohrer, New York, $7,250; Cement Paving & Construction Co., Long Island City, $9,965.

The Commissioner of Water Supply, Gas and Electricity, in his annual report, has recommended that about $2,000,000 be appropriated during the coming year for the extension of the high-pressure fire service in Manhattan and Brooklyn. Henry S. Thompson is Comr.

***New York, N. Y.**—Bids were received as follows on Sept, 26 by the Board of Water Supply, New York, for Contract 103, for the construction of a portion of the Queens Conduit, a portion of the city pipe lines of the Catskill Aqueduct, extending from near the junction of Willoughby Ave. and Broadway, Brooklyn, along Willoughby and Evergreen Aves., Troutman St., Flushing Ave., Grand St. and Fisk Ave. to Thompson Ave., Queens Borough: Beaver Engineering & Contracting Co., New York, $344,053; Newman & Cary Co., Brooklyn, $349,654; Joseph Burns, New York, $351,945; L. E. Kelly, Brooklyn, $357,105; Cranford Co., Brooklyn, $359,616; John C. Rodgers, Jr., New York, $368,733; Degnon Contracting Co., $385,317; United Engineering & Contracting Co., New York, $389,275; Murphy Bros., Brooklyn, $397,137; Borough Development Co., Brooklyn, $410,077; Rodgers & Haggerty, Inc., $415,007; Keystone Construction Co., Philadelphia, Pa., $441,140; William Kelly, Brooklyn, $448,246; Phoenix Construction Co., New York, $497,862; J. F. Cogan Co., $492,002; King - Ganey Contracting Co., $476,965. The above totals are approximately only. The work includes furnishing and laying about 20,870 ft. of 49-in. c.-i. pipe, with valves and appurtenances and maintenance for one year.

New York, N. Y.—Bids were received by the Board of Water Supply on Sept. 26 for contract 100, for the construction of the extension of Croton blow-off, Croton Division, in the town of Yorktown, Westchester County. The lowest bid submitted, it is reported, was that of the Stobaugh Contracting Co., 1 Madison Ave., New York, at $41,572.

New York, N. Y.—Bids will be received by the Department of Public Charities until 2.30 p. m., Oct. 17, for furnishing all the labor and materials required for installing pumps, erecting coal railway and for pipe fitting work, etc., for the power house, Metropolitan Hospital, Blackwells Island, City of New York.

Tarrytown, N. Y.—We are officially advised that bids have been received as follows by the city for furnishing pipe: U. S. Cast-Iron Pipe & Foundry Co., 71

Broadway, New York, $21.45 per ton, delivered at Tarrytown, $21.70 at Tarrytown Heights, $20.30 delivered at dock; and $48 for fittings per ton; delivery before Nov. 30. Standard Cast-Iron Pipe & Foundry Co., $21.40 at Tarrytown; $21.70 at Tarrytown Heights; $47.50 per ton for fittings; Oct. 25. Donaldson Iron Co., $22.04 at Tarrytown; $22.34 at Tarrytown Heights; $50 for fittings per ton; Nov. 15. R. D. Wood & Co., $22.15 at Tarrytown; $22.45 at Tarrytown Heights; $21.25, at dock; $21.10, at boat in channel; $48 per ton for fittings, boat; $50., rail, five to seven weeks after receipt. Warren Foundry & Machine Co., $23.50 at Tarrytown; $23.50 at Tarrytown Heights; $48 before Oct. 4 for fittings; John Fox & Co., $22.30, at Tarrytown; $22.30 at Tarrytown Heights; $49.50 for fittings before Nov. 15.

Bids for laying pipe were received as follows: (a) laying 10-in. pipe on Sunnyside and Union Aves. per ft.; (b) 8-in. pipe on Union Ave., per ft.; (c) 10-in. on Highland and Prospect Aves., per ft.; (d) 6-in. pipe and removing 6-in. pipe on Prospect Ave., per ft.; (e) 10-in. and removing 4-in. pipe on North Broadway, Wildey, South Orchard and Franklin St., per ft.; (f) rock excavation, per cu. yd.; (g) timber planking etc. left in trench per M. Antonio Lambo, (a) 52 cts.; (b) 50 cts.; (c) 52 cts., (d) 49 cts.; (e) 54 cts.; (f) $5. (g) $20; Duell & Holloway, (a) 79 cts.; (b) 74 cts.; (c) 79 cts.; (d) 70 cts.; (e) 84 cts.; (f) $4. (g) $60; Tony Richards, (a) 61 cts.; (b) 52 cts.; (c) 52 cts.; (d) 50 cts.; (e) $1.04; (f) $3.; (g) $52.; Hudson River Cont. Co., (a) $1.10 cts.; (b) $1.10; (c) $1.10; (d) $1.10; (e) $1.10; (f) $2.50; (g) $20; Wm. J. Watson Cont. Co., (a) 95 cts.; (b) 95 cts.; (c) $1.15; (d) 90 cts.; (e) 90 cts.; (f) $3.; (g) $45; Edw. Jackman, (a) 47 cts.; (b) 47 cts.; (c) 47 cts.; (d) 47 cts.; (e) 47 cts.; (f) $2.50; (g) $40; Daniel Donovan, (a) 90 cts.; (b) 80 cts.; (c) $1.05; (d) 25 cts.; (e) 30 cts.; (f) $4; (g) $35. Contracts have been awarded, it is reported, as follows; To STANDARD CAST IRON PIPE & FOUNDRY CO., for furnishing pipe and to EDWARD JACKMAN for laying pipe.

Whitehall, N. Y.—The Village Trustees are considering improvements to the water-works system by obtaining a better water supply from Long Pine or Pine Lake on Dresden Mountain.

Jersey City, N. J.—The Finance Board has sold bonds, it is reported, for $6,776,000 to take over the water-works at Boonton from the Jersey City Water Supply Co.

Totowa, N. J.—The Borough Council has decided to employ Joseph B. Rider, New York, and Chicago, Ill., to prepare plans and estimates for the installation of water-works.

+Wehrum, Pa.—The contract has been awarded to PAUL AZZAZA, of Barnesboro, Pa., for constructing a large reservoir here for the Lackawanna Coal & Coke Co.

Bethlehem, Pa.—The Town Council is considering the installation of a new water plant. Estimated cost, $175,000.

Emaus, Pa.—We are offically advised that the borough has employed the firm of Chester & Fleming, Consult. Engrs., Pittsburgh, Pa., to design and install a disinfecting plant for the water supply. The plant will be installed at the main pump station and will drain the entire supply which is obtained from drilled wells in limestone formation.

Philadelphia, Pa.—Bids will be received until 11 a. m., Oct. 6, by the Depot Quartermaster, U. S. A., 26th St. and Gray's Ferry Road, Philadelphia, for furnishing all labor and materials for installing a fire main system in Buildings Nos. 1 and 2.

Homestead, Pa.—The borough has employed the firm of Chester & Fleming Hydraulic Engrs., Pittsburgh, Pa., to make an examination of their water plant and submit a report and recommendations regarding its betterment to the Council.

Cumberland, Md.—The Evitts Creek Water Co., Bedford, Pa., has been granted a franchise by the State. The company will have charge of the construction of the dam and the supplying of water to be brought from Evitts Creek to Cumberland, on which new water supply the city of Cumberland will expend $500,000. D. Lindley Sloan, City Secy.; George G. Young, Mayor, and Charles Mack, of Bedford, are interested.

Baltimore, Md.—See item under Miscellaneous Contracts.—Stables, Baltimore, Md.

Grafton, W. Va.—The city on Sept. 21 voted to issue $90,000 of bonds for the installation of a water system. Riggs & Sherman, Consult. Engrs., The Naseby, Toledo, Ohio, prepared plans. Noted on Aug. 24.

Cameron, W. Va.—The city has voted $5,000 of bonds for the installation of a water-works system.

Wheeling, W. Va.—The Board of Control has awarded the contract to W. J. McCLAIN for constructing water system in South Belmont St. and Edgehill Addition.

***Charlotte, N. C.**—Bids will be received by the Board of Water Commissioners at the office of A. H. Wearn, Clk., until 3 p. m., Oct. 17, for the following: Laying about nine miles of 24-in. c.-i. pipe, furnishing valves, furnishing two 300-HP. motors, furnishing two centrifugal pumps, 5,000,000 gallons capacity each, furnishing one 3,000,000-gallon steam pump; furnishing transformers and switchboard, furnishing two boilers and setting same. Bids for other work and materials will be advertised for later. Plans and specifications will be on file at the office of the Clerk and at the office of Gilbert C. White, Engr., Charlotte, N. C. Advertised last week.

Weldon, N. C.—The city has voted $40,000 of bonds for the installation of a water-works system.

Red Springs, N. C.—G. C. White, Consult. Engr., Durham, N. C., is preparing plans for the installation of water-works and a sewer system to cost about $35,000.

Johnston, S. C.—The town is considering issuing bonds for $20,000 for the installation of a water-works system.

Clarksville, Ga.—John Martin has franchise and will organize company with $10,000 capital stock, it is reported, to construct a water-works system here to include a 50,000-gallon tank, 150,000-gallon reinforced-con- reservoir. Estimated cost, about $10,000.

Jesup, Ga.—We are officially advised that bonds for $25,000 have been sold for the installation of water-works. Arthur Pew, Atlanta, Ga., is Engr. Noted on Sept. 21.

Fort Barrancas, Fla.—We are officially advised that bids were received as follows on Sept. 20 by the Quartermaster, U. S. A., for water-works extensions, including main extension, laying new mains, providing hydrants, connecting pumps, etc.: Gulf Machine Works, $5,437; Charles A. Bonn, $4,500; W. C. Pease, $4,410; Newport Contracting & Engineering Co., $4,400.

Gainesville, Fla.—The city is considering issuing $40,000 of bonds for the improvement of the water-works system.

Mobile, Ala.—The city is considering extending the water mains from Tennessee and Ann Sts., in Baltimore St., to Washington Ave. C. W. Soost is Supt. W.-Wks.

Shreveport, La.—We are officially advised that E. B. Black, Vice-Pres., J. S. Worley Co., Engrs., Reliance Bldg., Kansas City, Mo., has been engaged by the city to appraise the water-works plant and sewer system.

Lafayette, La.—The City Council has adopted an ordinance providing for an issue of $60,000 of bonds to overhaul the water and light system.

Jellico, Tenn.—W. G. Kirkpatrick, Consult. Engr., Jackson, Miss., has prepared plans for the installation of water-works here. Estimated cost, about $55,000. Bonds have been sold. A. B. Mahan is Secy. Water Comn.

Corbin, Ky.—The City Council is considering an issue of bonds for the installation of a water-works system.

+Cleveland, Ohio.—The contract has been awarded to ANDREW DALL & SON by the City Council for the construction of the foundation for the new high pressure pumping station at East Eleventh St. and Lakeside Ave. N. E.

+The STANDARD CONTRACTING CO. has submitted the lowest bid, at $9,163, to the City Council for the construction of the seawall at the Kirtland pumping station.

Columbus, Ohio.—Bids will be received until Oct. 13 by the city for furnishing and delivering c.-i. pipe to the Department of Public Service. The bids call for 250 tons of c.-i. pipe, either delivered or f. o. b. cars. H. S. Holton is Dir.

Elmore, Ohio.—The town has decided to install a system of water works.

Navarre, Ohio.—The town is considering the installation of a water works system. Fred Salberg is mayor.

Cincinnati, Ohio.—Bids will be received by the Director of Public Service until noon, Oct. 6, for manufacturing, furnishing and delivering c. i. pipe and special castings for the water distribution system during the year 1911.

Dayton, Ohio.—Bids will be received until noon, Oct. 9 by J. C. Ely, Dir. Pub. Wks., for constructing about 110 water connections in Phillips Ave.

+Cincinnati, Ohio.—Bids were opened by the Board of Public Service on Sept. 11 for grading grounds, etc., building foundations, etc., dismantling, hauling and re-erection of tanks for the Western Hills service of the water distribution system. The contract has been awarded to the L. EID CONCRETE STEEL CO., at $78,089.

+Urbana, Ohio.—The contract for pumping machinery for the water works has been awarded by the city to the LAIDLAW-DUNN-GORDON CO. of Cincinnati, Ohio, at $10,640. Bids were opened on Sept. 18.

Hubbard, Ohio.—The Village Council has decided to issue bonds for $30,000 for the installation of a water-works system.

Toledo, Ohio.—We are officially advised that bids were received as follows by the city on September 29 for the construction of the filtered water reservoir: (a) excavating and grading, about 100,000 cu. yds., (b) concrete work, about 101,000 cu. yds., (c) gate house, (d) setting valves, sluice gates, etc., (e) laying c.-i. pipe, (f) totals: M. Robbit & Sons Co., (a) $77,174, (b) $135,412, (c) $3,741, (d) $100, (e) $2,627, (f) $218,785, 300 days: Breyman & Oneil, (a) $50,000, (b) $74,000, (c) $3,000, (d) $100, (e) $900, (f) $128,000, 270 days; Ensminger Bros., (a) $28,000, (b) $86,740, (c) $1,000, (d) $800, (e) $1,000, (f) $117,540, 300 days; Cleary White Construction Co., (a) $56,876, (b) $109,171, (c) $3,000, (d) $500, (e) $1,695, (f) $171,248, 300 days; H. J. Spieker Co., (a) $58,608, (b) $119,034, (c) $843, (d) $500, (e) $429, (f) $179,714, 250 days; The A. Bentley & Sons Co., (a) $90,000, (b) $104,000, (c) $1,850, (d) $350, (e) $3,000, (f) $199,200, 400 days; The J. Connelly Construction Co., (a) $42,680, (b) $97,000, (c) $1,500, (d) $750, (e) $1,500, (f) $143,430, 300 days; The Beers-Offut Construction Co., (a) $33,000, (b) $79,000, (c) $1,250, (d) $250, (e) $900, (f) $114,400, 360 days. William G. Clark is Engr., The Spitzer, Toledo.

Morocco, Ind.—The town has granted a franchise for the installation of a water-works system.

Baraga, Mich.—Bids will be received until 2 p. m., Oct. 16, by the village at the office of James McMahan, Village Clk., for changes in and improvements to the water-works system, and for the construction of an electric light plant. The work will include the following: Gravity pipe-line; 180,000-gallon reinforced-concrete reservoir; wells; brick building, 42 × 89 ft., with extensions; 120-HP. gas producer plant, one 85-HP., and one 35-HP. gas engine; or oil engines of same size, 400-gallon triplex pump; electrical installation, 50-KW. generator, switchboard, etc.; and pole-line and wiring. Bids will be received on all or part of the work. Plans, etc., may be seen at Baraga, or at the office of the Oscar Claussen Engineering Co., St. Paul, Minn.

Ware, Ill.—Bids will be received until 2 p. m., Oct. 9, by the Board of Administration, of Springfield, Ill., for drilling a well in the Village of Ware on ground controlled by the Board for the Anna State Hospital. F. D. Whipp is Fiscal Superv.

+Chicago, Ill.—Bids were received by L. E. McGann, Comr. Pub. Wks., on Sept. 18 for furnishing the material and constructing complete the structural steel and other work for the roof, well platforms and derricks of the superstructure of the Edward F. Dunne Crib, and the foot bridge to the 68th St. crib. The contract has been awarded to JOHN J. GALLERY, Chamber of Commerce Bldg., Chicago, at $8,600.

Lyons, Ill.—Bids were received by the Bd. of Local Improvements on Sept. 14 for the construction of water-works. The lowest bid was that of H. J. McNichols, as follows: 4,975 ft. of 6-in. mains, 85 cts.; 4,143 ft. 4-in., 70 cts. Total, including hydrants and valves, $12,365. Other bidders were: Green & Sons Co., $15,967; James Healey, $17,260; Henning & Vineyard, $15,104.

Chenoa, Ill.—Bids will be received until 7:30 p. m., Oct. 9, by the city, for the construction of a concrete circular reservoir. Melluish & Broyhill are Engrs., Bloomington, Ill.

Chicago, Ill.—Bids will be received by the Board of Local Improvements, until 11 a. m., Oct. 10, for the construction of water service pipes in North 53d St., between Grand and Fullerton Aves. Edward J. Glackin, is Secy.

Cornell, Ill.—Bids will be received by J. I. McVay, Chn. W-Wks. Com., until 7.30 p. m., Oct. 16, for the construction of a water-works plant.

St. Charles, Ill.—Bids will be received by the Board of Administration, Springfield, Ill., until 2 p. m., Oct. 9, for drilling an artesian well at the St. Charles School for Boys, St. Charles. Frank D. Whipp, Springfield, is Fiscal Superv.

Milwaukee, Wis.—Theodore Olsen, Village Clk, East Milwaukee, will receive sealed bids until Oct. 10 for laying a 6-in. c.-i., water main in Marion, Downer and Olive Sts.

+The Department of Public Works has awarded a contract to the GRAY WATER SUPPLY CO. for making test borings for the proposed new intake in Lake Michigan, at $6,000. It is proposed to build a new intake 4,000 ft. long and a new pumping station at foot of Linwood Ave., the total cost to be $850,000. Harry E. Briggs, is Comr. Pub. Wks.

La Crosse, Wis.—We are officially advised that plans will be ready about Nov. 1 and contracts awarded shortly after for the installation of the water-works plant here. Estimated cost: Water mains, $70,000; well-system water supply, $35,000; pumping machinery, $38,000; building reservoirs, chimney, etc., $117,000; total, $260,000. A. T. Maltby, 20 West Jackson Boulevard, Chicago, Ill., is Engr. Noted on Aug. 17.

***Sheboygan, Wis.**—Bids will be received by the Board of Water Commissioners, Theo. Dieckmann, Pres., until 3 p. m., Oct. 16, for furnishing, delivering and erecting complete on foundations furnished by the city one 8,000,000-gallon pumping engine in an addition to the present pumping station of the city, in accordance with specifications on file at the office of the Board of Water Commissioners. Advertised last week.

+Belle Plaine, Iowa.—The contract for constructing water-works extensions here has been awarded by the city to MALLORY & CO., of Kewanee, Ill., at $17,173. Bids were opened on Sept. 11.

Donnelison, Iowa.—The city is considering the installation of a water-works system.

+Lost Nation, Iowa.—We are officially advised that the contract for the construction of water-works here has been awarded by A. L. Cook, City Clk., to the NATIONAL CO., of South Bend, Ind., at $8,759. Bids were opened on Sept. 21.

+Belle Plaine, Iowa.—The contract for constructing the water-works system here has been awarded by the city to MALORY & CO., of Kewanee, Ill., at $17,173.

Audubon, Iowa.—The Council is considering the installation of a deep-well water-works system.

Jefferson, Iowa.—The Des Moines Bridge & Iron Works, Des Moines, Iowa, has been engaged to prepare plans for the erection of a tower and tank, with a capacity of 100,000 gallons. Estimated cost, between $5,000 and $6,000.

Perry, Iowa.—The Council is considering the Construction of 6,000 ft. of 4-in. mains and seven fire hydrants. Estimated cost, $5,400.

+International Falls, Minn.—FRAZER & DANFORTH, 411 Hackney Bldg., St. Paul, Minn., have been awarded the contract for water and sewer extensions at $16,000.

Duluth, Minn.—We are officially advised that bids will be readvertised by the city for constructing a tank and tower. Bids were opened on Sept. 25. W. B. Patton is Engr., Duluth, Minn.

Council Grove, Kan.—The citizens have voted to issue bonds for the purchase of the water plant. M. W. Perry is City Clk.

Chapman, Kan.—The citizens have voted to issue $25,000 of bonds for installing a municipal water-works system. Noted on Aug. 24 and Sept. 7.

Glasco, Kan.—Rollins & Westover, Consult. Engrs., Beals Bldg., Kansas City, Mo., have completed plans for the installation of water-works and electric lights. Estimated cost, $25,000.

+Sylvan Grove, Kan.—Contracts for the construction of a water-works and electric light plant have been awarded as follows: General construction to the COMMERCIAL CONSTRUCTION CO., Reliance Bldg., Kansas City, Mo.; tower and tank to the CHICAGO BRIDGE & IRON WORKS, 105th and Throop Sts., Chicago, Ill. Von Unwerth & Cook are Engrs., Finance Bldg., Kansas City.

Decatur, Neb.—Bids will be received until 6 p. m., Oct. 17, by the city for the construction of a water-works system. Estimated cost, $15,000. Noted on July 6.

+Malmo, Neb.—The contract has been awarded to the ELKHORN CONSTRUCTION CO., of Fremont, Neb., by the village for the construction of a water-works system, at $7,164. The work includes a tank nad tower, pump, well and engine house, 3,000 ft. of 4-in. pipe, 300 ft. of 6-in. pipe and 13 hydrants. L. G. Nelson is Village Clk. Bruce & Standeven, Bee Bldg., Omaha, Neb., are Engrs. Bids were opened Sept. 9.

Kennebec, S. Dak.—E. K. Mathes, of Mitchell, S. Dak., has prepared plans for the installation of water-works. Estimated cost, about $6,000. J. W. Jackson is Town Atty.

Mobridge, S. Dak.—The citizens have voted to issue $7,000 of bonds for constructing water-works. M. T. Woods is City Audr. Noted on Sept. 7.

+Sioux Falls, S. Dak.—The contract for sinking a well has been awarded by the city to FRASER & DANFORTH, 411 Hackney Bldg., St. Paul, Minn., at $11,200. Bids were opened on Sept. 15.

Sioux Falls, S. Dak.—The city has voted to issue $100,000 of bonds for extensions to the water-works system.

McClusky, N. Dak. — The city has voted bonds for the installation of a water-works system.

+Minot, N. Dak.—We are officially advised that the contract has been awarded to GEORGE W. KEMPER by the city, for 5,000 ft. of 6-in. water main, at $6,990. Bids were opened on Sept. 25.

+Montgomery, Mo.—The city has awarded the contract for constructing a water-works system here to J. A. PRINGLE, of Kansas City, Mo., at $11,787. The Fuller-Coult Co., Chemical Bldg., St. Louis, Mo., is Engr.

Pacific, Mo.—The city has engaged the Fuller-Coult Co., Chemical Bldg., St. Louis, Mo., to prepare plans for the installation of water-works of 360,000 gallons capacity, including a 75,000-gallon concrete reservoir. Estimated cost, about $15,000.

Unionville, Mo.—The city has decided to reconstruct and extend the water-works and electric light systems. Bonds for $10,000 have been issued.

Liberty, Mo.—Bids will be received by the City Clerk until Oct. 6 for furnishing all material and installing a 4-in. c.-i. pipe line in Mill St., from Water to Missouri Sts. E. H. Collins is City Engr.

Clarksville, Ark.—Surveys are being made by Winters & Dove, Consult. Engrs., Fort Smith, Ark., for the installation of a water-works, sewerage and light system.

Temple, Tex.—Bids will be received until Oct. 14 by the Board of Water Commissioners for furnishing a horizontal, duplex, triplex expansion condensing pumping engine of a capacity of 3,000,000 gallons in 24 hours. P. Bracken is Supt.

Waco, Tex.—The Water Commissioners are planning to make improvements to the water-works system.

Austin, Tex.—Plans have been prepared by J. C. Dumont, Austin, and associates for the construction of a 15-ft. dam across the Colorado River near Austin for the purpose of affording a water supply for irrigating about 10,000 acres of land. The dam will be built of reinforced concrete 350 ft. long, and besides furnishing a reservoir water supply for irrigation will give an initial power for generating 350 HP. of electrical energy that will be transmitted to neighboring industrial enterprises.

Corpus Christi, Tex.—The City Council has in contemplation the construction of a dam across Nueces Bay for the purpose of impounding the flood waters of the Nueces River. The capacity of the proposed reservoir will be about 1,000,000,000 gallons. Besides affording a water supply for the city it is planned to utilize the surplus for irrigating about 50,000 acres of land. F. H. Lancashire, C. E., of Dallas, Tex., is making an investigation for the city as to the best practical source of its water supply and, it is reported, has pronounced the project of damming the bay as feasible.

Harlingen, Tex.—The taxpayers have voted to issue $22,000 of bonds for the installation of water-works and an electric light plant and $10,000 for street improvements. Contracts will soon be let.

Midland, Tex.—The Midland Land & Irrigation Co. is installing an extensive shallow well pumping system near here. Other plants of a similar character will also be installed.

New Castle, Tex.—Steps have been taken to install a water-works plant here. A reservoir will be constructed with a capacity sufficient to furnish a water supply for a city of about 30,000.

Archer City, Tex.—The Attorney-General's Department, Austin, Tex., has approved an issue of bonds for $12,000 by Archer City for the construction of water-works.

+Fort Worth, Tex. — The contract has been awarded to A. M. LOCKETT & CO., New Orleans, La., by the City Commission for two air compressors for the water-works plant, at $6,966. The Van Zandt-Moore Iron Works submitted a bid of $8,334.

Paris, Tex.—The citizens have voted to issue bonds for $35,000 for the improvement of the water supply.

+The city has awarded the contract to W. E. TOMERLIN for drilling a deep well at the city lake. Estimated cost, $20,000.

***San Antonio, Tex.**—Bids will be received by the Medina Irrigation Co., 520 East Houston St., San Antonio, until 3 p. m., Oct. 20. for building twelve or more contract sections of its west canal, located about 23 miles west of San Antonio and having an aggregate length of approximately 28 miles. Canals will have bottom widths of 20 ft. in level ground, 15 ft. in sidehill work, ten feet in concrete lined channels and will include approximately 1,400,000 cu. yds. of classified excavation material, two reinforced concrete syphons, concrete culverts, flume approaches, and bridge crossings. Contract sections will be approximately of equal magnitude. Bidders will be required to qualify as to past performance and ability to furnish adequate plant. Further information blank forms for proposals and detailed plans and specifications may be obtained by responsible parties from the company at the above address and at its New York office, 20th floor, 25 Broad St., New York. Advertised last week.

Clinton, Okla.—The citizens have voted to issue $30,000 for sinking a deep well. Bids will be asked as soon as the bonds are sold.

McAlester, Okla.—The city has awarded the contract to BENNETT & ROOKS of McAlester for constructing a dam at the watershed at $41,240. W. P. Halliday, is City Engr.

Garrett, Okla.—Bell & White, of Lamar, Ohio, will, it is reported, prepare plans for an irrigation system for Cimarron County. Estimated cost, about $1,000,000.

Muskogee, Okla.—Bids were received on Sept. 19 by the City Council for the construction of water intake and inlet tower. The lowest bid was that of the Southwestern Engineering Co., of Oklahoma City, at $105,650 for brick, and $108,108 for concrete tunnel. The intake will be a 54-in. diameter, 2,600 ft. long, and is to be laid across the Arkansas River and up the head of the Grand River. The intake tower is to be a concrete structure built at the upper end of the intake. Charles Wheeler, Jr., is City Clk. Alexander Potter is Consult. Engr., 116 Liberty St., New York.

Denver, Colo.—The Park Engineers are preparing estimates for a water system for the new Marion St. Parkway, extending from Speer Boulevard to Washington Park. The pipes will be put in during this winter.

Pocatello, Idaho.—Preliminary plans are being made for the installation of a municipal water system here. No work on construction will be done this year. J. P Congdon is City Engr.

Payette, Idaho.—Bids will be received until Oct. 10, by the city for water-works extensions, including 20,000 ft. of 4 and 6-in. iron pipe and fixtures. Estimated cost, $9,000. W. C. Sturdevant is City Engr. Noted on Sept. 21.

Emmett, Idaho.—Bonds for $1,100,000 of the Emmett Irrigation District were sold on Sept. 13. The proceeds will be used to take over the property of the Canyon Canal Co. and furnish water for the Emmett bench.

Ogden, Utah.—The City Council is considering constructing a dam and storage reservoir in the South Fork Canyon, and has appropriated $3,500 for the preliminary work. Estimated cost, $211,000.

Ellensburg, Wash.—We are officially advised that bids will be asked within 60 days by the city for the construction of the municipal water system. The work will include 24 miles of mains, a 1,000,000 gallon reservoir, and 4,000,000-gallon pumping station. Estimated cost, $150,000. G. N. Miller is City Engr. Noted on Sept. 21.

Morton, Wash.—The City Commissioners have granted a franchise to A. W. Van Arsdale for the installation of a water and light system.

+Seattle, Wash.—The contract for planking and laying watermains in Rainier Ave. and Dearborn St. has been awarded to L. H. GOERIG at $24,379.

Canyon City, Ore.—The city has decided to install a new water system. Iron pipe will be used. Estimated cost, $6,000.

+Myrtle Creek, Ore.—The contract for furnishing 11,000 ft. of 6 to 12-in. pipe for the water-works system has been awarded to S. B. CROUCH of Roseburg, Ore., by the city.

+Portland, Ore.—The contract has been awarded to WILLIAM ISENSEE, by the Water Board for an iron fence around Reservoirs Nos. 5 and 6 on Mt. Tabor at $10,384.

Gold Hill, Ore.—C. H. Green, of Spokane, Wash., is preparing plans for the installation of water-works here. Estimated cost, about $25,000.

Exeter, Cal.—A Correction.—We are officially advised that bids will be received until Oct. 18 on bonds for and not on the construction of the water-works system as erroneously noted on Sept. 28. Sloan & Robson are Engrs., Nevada Bank Bldg., San Francisco, Cal. C. T. Buckman is City Engr.

+Redlands, Cal.—The contract has been awarded to SMITH, EMERY & CO., of Los Angeles, Cal., by the Domestic Water Co. to construct two sterilizing plants at the reservoirs east of the city, at about $5,000.

Willow, Cal.—Notice of appropriation of 100,000 miners' inches of water from Little Stony Creek has been filed with the County Recorder by the Wormoth-Kerling Co. for irrigation purposes, extending through Glenn County, and including territory west of Willows and into Tehama County and on the north. A reservoir will be constructed.

Venice, Cal.—Plans are being prepared for the installation of a municipal water plant.

+Alturas, Cal.—The contract has been awarded to A. E. PEARSON by the town for the construction of the water-works system, at $9,486. Bids were opened on Sept. 15. Sloan & Robson are Engineers; Nevada National Bank Bldg., San Francisco, Cal.

North Bay, Ont.—Bids will be received until 6 p. m., Oct. 9, by T. N. Colgan, Comr. Pub. Wks., for the construction of a 16-in. steel intake pipe at Trout Lake, about 850 ft. in length together with a concrete pump well and c.-i. pipe connection to pumps. Plans and specifications may been seen at the office of the Commissioner and at the office of the John Galt Engineering Co., Winnipeg, Man., from whom any information may be obtained.

+Saskatoon, Sask.—We are officially advised that the contract for constructing the water filtration plant has been awarded by the city to the ROBERTS FILTER MFG. CO., INC., Darby. Philadelphia, Pa.

SEWERAGE.

Woodsville, N. H.—Bids will be received by the Commissioners of the Woodsville Fire District until 7.30 p. m., Oct. 11, for the construction of 4,800 lin. ft. 18, 12 and 8-in. sewer manholes, etc., in Woodsville. Specifications and plans may be seen and blank forms and proposals will be furnished upon application to the Commissioners. James F. Leonard is Clk.

Boston, Mass.—Bids will be received until Oct. 6 by the Department of Public Works for relaying 16-in. pipe for a distance of 2,800 ft. in Albany St. Louis K. Rourke is Comr. Pub. Wks.

Bids will be received until Oct. 9 by the Department of Public Works for sewerage works in Blagden and Exeter Sts., and for the construction of macadam roadways in Wallingford Road, Brighton, Kilton St., Dorchester and Kenneth St., West Roxbury. Louis K. Rourke is Comr. of Pub. Wks.

+Yonkers, N. Y.—Contracts have been awarded by the Board of Contract and Supply as follows: Constructing a sewer in Ashburton Ave., from a point 250 ft. north of Yonkers Ave. to Walnut St., to F. E. GROSS & SON, 819 Nepperhan Ave.; constructing house sewers in Glen Road and Glen Ave., between Sterling Ave. and the Bronx River, to the O'ROURKE CO., 21 Riverview Place.

+Buffalo, N. Y.—The City Council has authorized the Commissioner of Public Works to award contracts for the construction of sewers as follows: To GEO. W. MOORE, a 10-in. tile sewer in Main St., between Homeworth and University Aves.; to DARK & CO., 12 and 10-in. tile sewers in Toledo St., between Clinton and Casimer Sts.; in Cable St., between Buffalo River and 1,430 ft. south of Clinton St.; 12 and 10-in. tile sewers in Spann St., between Clinton and Cassimer Sts.; to JOHN M. FAHNING, a 10-in. tile sewer in Sheridan Ave., between Northland and East Delavan Aves.

Buffalo, N. Y.—Bids will be received by the Department of Public Works, Francis G. Ward, Comr., until 11 a. m., Oct. 6, for constructing a 10 and 15-in. tile sewer in Wende St.

Buffalo, N. Y.—The City Council has ordered construction of a 10-in. tile sewer in Morgan St., between Tupper St. and Trinity Pl.

+Reading, Pa.—The contract for constructing a concrete storm sewer on Franklin St., between the canal of the Schuylkill Navigation Co. and Sixth St., has been awarded to FEHR & O'ROURKE, Reading, at $40,413. Other bids noted Sept. 28.

Verona, Pa.—Bids will be received by the Borough of Verona until 2 p. m., Oct. 9, for constructing 940 ft. of 8-in., 835 ft. of 10-in., and 155 ft. of 12-in. sewers, three manholes and three single flush tanks. Plans and specifications can be seen at the office of Frease & Sperling, Boro. Engrs., Carl Bldg., Wilkinsburg, Pa.

Westchester, Pa.—Surveys are being made by N. R. Rambo, Boro. Survey., for a storm sewer on East Market St.

Brownsville, Pa.—Bids will be received by T. B. Young, Boro. Engr., until 6 p. m., Oct. 9, for the construction of sanitary sewers with all necessary appurtenances on Clover St., from Pearl St. to Green Lane and on Green Lane, from Clover to Broad St.

Sewickley, Pa.—See item under Streets and Roads.

Woodlawn, Pa.—Bids are being received by the Borough Clerk for laying 1,000 ft. of 27-in. tile pipe sewer, 800 ft. of 24-in. pipe sewer, 1,100 ft. of 15-in. pipe sewer, the construction of six manholes and 16 catch-basins. A. W. Anderson, is Boro. Engr.

***Baltimore, Md.**—Bids will be received by the Board of Awards until 11 a. m., Oct. 18, for furnishing and installing sewage screens for the sewage disposal works; and until 11 a. m., Oct. 25, for constructing Section No. 2, Storm-Water Contract No. 16 of the Jones' Falls Conduits, requiring approximately: 16,000 cu. yds. earth excavation, partly in tunnel; 47,200 cu. yds. rock excavation, chiefly in tunnel; 1,000 cu. yds. embankment; 47,370 cu. yds. concrete masonry; 925 cu. yds. brick masonry; 3,340,000 lbs. of reinforcing steel; 11,000 sq. yds. granolithic surfacing; 57 tons plate girders; 170 tons c.-i. pipe and specials; 900 lin. ft. vitrified pipe, 6 to 30 ins. in diameter; 4,000 lbs. cast iron; 30,000 lbs. steel I-beams; tearing down and removing three bridges. Plans and specifications are on file with Calvin W. Hendrick, Ch. Engr., Sewerage Comn.

+Baltimore, Md. We are officially advised that bids for Storm-water Contract No. 13 have been received by the Board of Awards, as follows: RYAN & REILLY, Philadelphia, $173,229 (awarded contract); David Peoples, Philadelphia, $170,209; Wm. McCarthy & Co., Baltimore, $176,203; David M. Andrew, Baltimore, $185,084; The J. Connelly Construction Co., Cleveland, $204,638; Jas. Ferry & Sons, Inc., Pittsburgh, $204,145; B. F. Sweeten & Son, Baltimore, $211,374; Whiting-Turner Co., Baltimore, $213,745; Calvin W. Hendrick is Ch. Engr., Sewerage Comn.

Parkersburg, W. Va.—Bids will be received by the City Council until 10 a. m., Oct. 5, for constructing sanitary sewers in accordance with plans on file with Frank Good, City Clk.

Rockhill, S. C.—We are officially advised that the contract for constructing three sewage disposal plants near the city, including three Imhoff tanks, two sprinkling filters, 75 × 150 ft., one contact bed. 75 × 150 ft., three sludge beds, 16 × 32 ft., dosing tanks, etc., was awarded on Sept. 25 to Porter & Boyd, Charlotte, N. C., at $48,500. T. W. Cothran is Engr. for the Comn. Noted Sept. 14.

+Timmonsville, S. C.—We are officially advised that a contract for constructing 8,000 lin. ft. of 8-in. sewers, a reinforced-concrete septic tank and filter beds, has been awarded to GEO. W. WAREING, Columbia, S. C., at $9,143. Noted Sept. 7.

+Louisville, Ky.—We are officially advised that the contract for constructing 1,450 ft. of 54-in. concrete sewer and 480 ft. of 30-in. vitrified pipe sewer was awarded on Sept. 26 to CHAS. E. CANNELL, at $22,136. The other bidders were: Henry Bickel Co., $24,026; Koppleman & Eady, $27,275; L. W. Hancock Co., $28,872. Noted Sept. 21.

Bellaire, Ohio.—See item under Streets and Roads.

Cleveland, Ohio.—Bids will be received at the office of the Director of Public Service until noon, Oct. 12, for the construction of sewers in various streets. Ira O. Hoffman is Secy.

Dayton, Ohio.—Bids will be received by J. C. Ely, Dir. Pub. Ser., until noon, Oct. 9, for the construction of storm-water sewers on Euclid Ave., and tributaries in accordance with the plans and specifications on file in the office of the City Engineer.

South Bend, Ind.—The Board of Public Works is planning to build a 20-in. pipe sewer from the St. Joseph River, on Ninth St. to Vine [illegible] thence on Ninth St. to Mishawaka [illegible] an 18-in. pipe sewer, together with the house connections to the curb along the line of the improvement [illegible] South Bend Ave., from Eddy to Howard [illegible] a 20-in. pipe sewer; from Howard [illegible] Woodworth St., an 18-in. pipe sewer [illegible] to the city limits a 15-in. pipe sewer. Detailed drawings and plans are on file with the Board. Arth[illegible] Perley is Clk.

Indianapolis, Ind.—Bids will be received by the Board of [illegible] Works until 10 a. m., Oct. 6, for constructing a sewer in Arsenal Ave. [illegible] 30th to 34th St. C. A. Schrader [illegible]es.

Terre Haute, Ind.—We [illegible] officially advised that the city will [illegible]rd sewer contracts on Oct. 9, amo[illegible] to $100,000. D. M. Roberts is City Engr.

Jasper, Ind.—The Town Trustees will receive bids until 7:30 p. m. on Oct. 16, for the construction of a sanitary sewer system. The estimated cost is $22,000. A. A. Lange is Town Clk.

+Aurora, Ill.—A contract for sewer construction at Aurora has been awarded to FRANK E. KAMI[illegible]KI, Watertown, Wis., at $20,000.

Chicago, Ill.—Bids for sewer construction have been received as follows: Marquette Constr[illegible]n Co., 184 West Washington St., Chicago, $34,834; Alex N. Tood, 179 Washington St., Room 405, Chicago, $35,061; Charles M. Porter Co., 118 North La Salle St., Chicago, $35,661; F. G. Proudfoot, [illegible]nity Bldg., Chicago, $35,843; H. G. [illegible]elitz, Oak Park, Ill., $36,225; John A. McGarry & Co., Security Bldg., Chicago, $37,253.

+Milwaukee, Wis.—The County Board of Supervisors has awarded a contract to CORNELIUS J. CRISL[illegible] & SON, 2018 Cedar St., Milwaukee, for the construction of sewers on each side of Grand Ave. Viaduct, at $1[illegible]201.

Bids will be received by the Department of Public Works until Oct. 5, for the construction of approximately 20,000 lin. ft. of sewers in various streets. Harry E. Briggs is Comr.

Burlington, Iowa.—Bids will be received by the City Clerk until 9 a. m., Oct. 5, for constructing a 9-in. vitrified pipe sewer from Lot 30 to connect with the Stony Lonesome sewer. H. G. Vollmer is City Engr.

+Logan, Iowa.—The contract for constructing a sewer system has been awarded to C. E. BRIGGS, Logan, at $20,000. Bruce & Standeven, Bee Bldg., Omaha, Neb., are Engrs.

Fairfield, Iowa.—We are officially advised that all bids were rejected on Sept. 25 for constructing a sanitary sewer system, as follows: Two sewage disposal plants, including settling tanks and filters; 482 ft. of 6-in. sewer; 63,032 ft. of 8-in. sewer; 7,745 ft. of 10-in. sewer; 11,520 ft. of 12-in. sewer; 162 manholes; 24 drop manholes; 14 lampholes; 61 flush tanks. J. P. Starr is Mayor and W L. Long, City Clk. Noted Sept. 21.

Centerville, Iowa.—Bids will be received until Oct. 14, for constructing about 16½ miles of sanitary sewers and two sewage disposal plants of the Imhoff type. Hall & Adams are Engrs.

Fort Scott, Kan.—We are officially advised that bids will probably be asked in about two months for about five miles of vitrified tile sewer, estimated to cost $75,000. A complete outfit for solid rock excavation will be needed. C. R. Fisher is City Engr.

Fullerton, Neb.—Bids will be received until Oct. 13, for a sewer system, estimated at $9,000. Bruce & Standiven, Bee Bldg., Omaha, Neb., are Engrs.

+Kansas City, Mo.—A contract for constructing sewers on various streets has been awarded to RUSHMORE & GOWDY, at $19,908.

St. Louis, Mo.—Bids will be received by the Board of Local Improvements until noon, Oct. 13, for constructing the Rock Creek Joint District Sewer, Second Section and branch, requiring the following sewers: 692 ft. of 10-ft. inside dimension horse-shoe reinforced-concrete sewer; 3,130 ft. of 13-ft. horse-shoe reinforced-concrete sewer, including junction chamber; 536 ft. of 8-ft. brick and Portland cement mortar sewer; 850 ft. of 6¼-ft. brick and Portland cement mortar sewer; 450 ft. of 6-ft. brick and Portland cement mortar sewer in tunnel; 292 ft. of 6-ft brick and Portland cement mortar sewer in open cut; 297 ft. of 5½-ft. brick and Portland cement mortar sewer; 650 ft. of 5-ft. brick and Portland cement mortar sewer: openings, slants, manholes and other appurtenances. Edward E. Wall is Pres. pro. tem., and William T. Findly, Secy.

Colorado Springs, Colo.—The Trustees of the Myron Stratton Home are having plans prepared for a sewer system for the cottages located north of Stratton Park, and a combined filtration and reservoir system for the Myron Stratton home at Broadmoor. The cost is estimated at $100,000.

Denver, Colo.—The Board of Public Works of the City and County of Denver has adopted details and specifications for the construction of subdistrict lateral or branch sewers and appurtenances for sanitary drainage in subdistrict No. 11 of the West and South Side Sanitary Sewer District. Estimated cost, $45,168. Henry Read is Pres. Bd.

Los Angeles, Cal.—Bids will soon be asked by the City Council for constructing the Arroyo de la Brea storm sewer.

GARBAGE DISPOSAL.

Pittsburgh, Pa.—The Council is considering plans, it is reported, for a refuse disposal plant. N. S. Sprague is City Engr.

Newport, [illegible]—The city is considering the construction of a garbage crematory. Estimated cost, $10,000.

Indianapolis, Ind.—The City Council, it is reported, has refused to ratify a contract made by the Board of Public Works for collecting and disposing of the city garbage. New bids will be asked under new specifications in a few weeks.

Aurora, Ill.—The City Council is about to award a contract for the construction of a 40-ton garbage crematory.

+Virginia, Minn.—The city has awarded the contract to the BAILEY MARCH CO., Minneapolis, for constructing the garbage incinerator. The KELOGG CHIMNEY CONSTRUCTION CO., 50 Church St., New York, secured the contract for the chimney.

Pasadena, Cal.—The Mayor has been authorized by the City Council to negotiate with [illegible] T. Harris, of Santa Monica, Cal., for the erection of an experimental plant at the city farm for the disposal of garbage by electricity, the city to have an option on the plant with the privilege of purchasing it within 40 days after installation. The tentative contract submitted to the Council provides for the construction at Mr. Harris's expense, of a unit with a reducing capacity of 500,000 gallons daily, equipped with electrical and magnetic appliances and operated 30 days free of expense. The city agrees to install pipe connections with the sewer system and to furnish electricity free of charge. After that period the city reserves the right to purchase or reject the plant within ten days. Estimated cost of the experimental plant, not more than $5,000.

STREETS AND ROADS.

(*Denotes that this work is advertised in Engineering News.)*

+Boston, Mass.—The contract for constructing a tar macadam roadway in Brookledge St., Roxburg, was awarded by the Public Works Department on Sept. 25 to JAMES DOHERTY, at $8,243. Other bids were: J. C. Coleman & Sons Co., $8,343; John Kelly Co., $8,683; John McCourt & Co., $9,086; Peter Gilligan, $9,102; F. S & A. D. Gore Corp., $9,249; D. E. Lynch, $9,976; Jeremiah J. Sullivan, $10,236. Louis K. Rourke is Comr. of Pub. Wks.

Norwalk, Conn.—Bids for paving Water and Main Sts. and West Ave. have been received as follows: Jos. A. McElroy, Norwalk, $2,34 per sq. yd. for brick; Doherty & Bros., $2.755 for brick; W. H. Arthur, $2.53 for brick; Pierce, Jr., Co., $2.03 and $2.07 for asphalt. The total cost is estimated at $100,000.

+Greenwich, Conn.—We are officially advised that the contract for paving, curbing and draining Lewis St., from Greenwich Ave. to Mason St., with wood block, was awarded on Sept. 25 to the FRANK E. MURRAY CONTRACTING CO., Port Chester, N. Y., at $7,077. The other bidders were Daly & Merritt, Port Chester, N. Y., $7,456; Warren Bros. Co., Boston, Mass., $6,022, for bitulithic, $6,023; Gregory & Merritt, Greenwich, $7,127. Noted Sept. 21.

New York, N. Y.—Bids will be received by George Cromwell, Pres. Boro. Richmond, until noon, Oct. 10, for constructing curbs and gutters on various streets.

New York, N. Y.—Bids will be received by Alfred E. Steers, Pres. Boro. of Brooklyn, until 11 a. m., Oct. 11, for regulating, grading, curbing, paving, etc., on various streets.

+Yonkers, N. Y.—Contracts have been awarded by the Board of Contract and Supply, as follows: To CHARLTON & WESTON, 90 Ash St., grading Fairview Ave., $6,495; grading Frederic St., $15,890; grading Marlborough Road, $4,220; grading Palmetto St., $6,490; grading New Ave., $17,478; to THOMAS GRADY, 11 Myrtle St., grading Murray Ave., $44,500.

The Board of Contract and Supply, James V. Mahoney, Secy., will receive bids until Oct. 16, for repaving Wells Ave., from River St. to Warburton Ave.; grading Springer Ave., from Bronx River Road to Yredenburgh Ave:; curbing and guttering Glover Ave., between McLean and Wakefield Aves.; curbing and guttering Alexander Ave., between McLean and Wakefield Aves.; constructing house sewers in Bronx River Road, from Emmons Place to Wakefield Ave., and in Wakefield Ave., from Bronx River Road to the Bronx Valley trunk sewer.

+Corinth, N. Y.—The contract for paving 4½ miles of streets in Corinth has been awarded to the SHAUGHNESSY CONSTRUCTION CO., Albany, N. Y., at $38,000. Noted Sept. 21.

+Westfield, N. J.—A contract for paving portions of First St. and Edgewood Ave. has been awarded to the WELDON CONTRACTING CO., at $7,323.

Harrisburg, Pa.—Bids will be received by W. W. Caldwell, Comr. Highway Department, until noon, Oct. 9, for constructing sheet asphalt pavement and granite curb on Forster St., from 16th to 17th Sts.

Philadelphia, Pa.—Bids for paving with wood block have been received by the Board of Public Works as follows: Barber Asphalt Paving Co., $2.99 per sq. yd.; United States Wood Preserving Co., $3.38; Cunningham Paving Co., $3.43; Van Buren & Son, $3.55; Filbert Paving & Construction Co., $3.85. The total cost is estimated at $250,000.

New Castle, Pa.—Bids will be received by H. M. Marquis, City Clk., until 8 p. m., Oct. 9, for grading Gray Way from Reynolds to Philips St.

Sewickley, Pa.—Bids will be received by M. M. Baker, Act. Engr., until 5 p. m., Oct. 9, for constructing 2,496 lin. ft. of curb and 2,847 sq. yds. of Tarvia pavement, and laying 655 lin. ft. of 8-in. and 430 lin. ft. of 6-in. vitrified sewer pipe, 32 Y Branches, and 3 manholes.

Philadelphia, Pa.—Bids will be received by Harry A. Mackay, Dir. Bureau of Highways, until noon, Oct. 6, for resurfacing macadam roads; amount available, $200,000.

+Harrisburg, Pa.—A contract for constructing 1,369 ft. of macadam road in Union Township, and 2,330 ft. of brick and 8,300 ft. of macadam in Carroll Township, has been awarded to DONALD McNEIL, Pittsburgh, Pa., at $74,358.

+Wilmington, Del.—T. Coleman du Pont, who is building the road to extend the entire length of the State of Delaware, has awarded a contract to GEORGE F. SNYDER, Philadelphia, for grading and constructing three miles of road. The section is between Georgetown and Millsboro, and will be the first actual construction work to be done on the boulevard. Noted April 20.

+Cumberland, Md.—A contract for constructing a concrete curb on Ann St. and stone curb on Laning Ave. has been awarded to LE FEVRE & EDWARDS, at $7,518.

Upper Marlboro, Md.—Bids will be received by the Board of County Commissioners until noon, Oct. 8, for grading and macadamizing one mile of Queen Chapel Road, between District line and Hyattsville. Bids are to be made on forms furnished by State Geological Survey, 532 North Howard St., Baltimore. Plans and specifications are on file with County Commissioners. St. J. Briscoe, Clerk.

Richmond, Va.—Bids will be received by the State Highway Commission until noon, Oct. 7, for grading and graveling about one mile of road near Chickahominy River, in Henrico County. Plans and specifications are on file at the office of the Commission. P. St. J. Wilson is State Highway Comr.

Falling Spring, W. Va.—Bids will be received by oJhn E. Dougher, County Road Engr., until Oct. 6, for grading the road over Sultzler Hill.

+Wheeling, W. Va.—The contract for paving the Glendale Road between Newman's Run and the north boundary line of Moundsville, has been awarded by the County Court to HOLDERMAN BROS., Benwood, W. Va., at $11,787. The item bids were: Paving with vitrified block, $1.04 per. sq. yd.; retaining wall, $4.50 per. cu. yd.

+Wheeling, W. Va.—A contract has been awarded by the County Commissioners to GEORGE W. LEMMON for repairing about 14,700 yds. of road.

Murphy, N. C.—Bids will be received by the Murphy Township Highway Commission at their office in Murphy until 2 p. m., Oct. 14, for grading the Peachtree Road, from Survey station 14 at Towns Common line to the mouth of Brasstown Creek, a distance of about seven miles. The work will consist of approximately: 55,000 cu. yds. grading, 700 cu. yds. rubble masonry, 580 lin. ft. vitrified pipe, 14,700 lbs. structural steel. Plans, profiles and specifications are on file at the office of G. W. Scott, Engr., Courthouse Bldg., and blank forms for proposals will be furnished upon application. W. H. Woodbury is Pres. and M. L. Manney, Secy.

About 2.5 additional miles of grading will be awarded in the near future.

+Burlington, N. C.—We are officially advised that a contract for street improvement was awarded on Sept. 29 to ABEE BROS. & HART, Hickory, N. C., at the following bids: Excavation, 27c per cu. yd.; macadam pavement, $1.08 per sq. yd.; concrete sidewalk, 90c per sp. yd.

Moulton, Ala.—Bids will be received by the Board of Commissioners of Lawrence County until 2 p. m., Oct. 30, for grading, draining and surfacing with Tishomingo gravel about 1½ miles of the Hillsboro-Moulton road. W. E. Hotchkiss, Courtland, Ala., is Engr.

+Memphis, Tenn.—Press reports state that contracts for paving have been awarded as follows: Nelly, Bly and Dunlap Sts., and Edith and Union Aves., to ROACH & MANNIGAN, at $46,067; Dudley St., to the MEMPHIS ASPHALT PAVING CO., at $32,432; Manassas St., to the SOUTHERN BITULITHIC CO., at $13,893; Iowa Ave., to E. J. WETTERSTROM, at $27,934; Iowa Ave., from South Main to South Third St., to J. W. Johnson, at $23,860.

+Nashville, Tenn.—A contract for constructing 1,400 yds. of turnpike has been awarded by the State Board of Education to the CAPITAL CITY CONSTRUCTION CO., at $8,700.

+Louisville, Ky.—The contract for paving a portion of Broadway with asphalt has been awarded to the BARBER ASPHALT PAVING CO., Louisville, at $23,200.

Chardon, Ohio.—Bids will be received at the office of the Commissioner of Geauga County, until 10 a. m., Oct. 13, for grading and paving with concrete 1.7 miles of road in Chester Township. Specifications, plans and profiles are on file in the office of the County Commissioners in Chardon, and at the State Highway Department. Estimated cost of construction, $10,649.

Bellaire, Ohio.—Bids will be received by the Director of Public Service until noon, Oct. 10, for paving and constructing sewers in various streets. R. E. Crow is Clk.

Cincinnati, Ohio.—Bids will be received by the Board of Commissioners of Hamilton County until noon, Oct. 27, for improving Montauk Road from the Milford corporation line to the Symmes Township line, in Columbia Township. Stanley Struble is Pres. and Fred Dreihs, Clk.

Columbus, Ohio.—Bids will be received at the office of the Commissioners of Franklin County until 2 p. m., Oct. 12, for grading and macadamizing 1.75 miles of road in Madison Township. Specifications, plans and profiles are on file in the office of the County Commissioners in Columbus, and at the State Highway Department. Estimated cost of construction, $9,539. James R. Marker is State Highway Comr.

Cleveland, Ohio.—Bids will be received by the Board of Commissioners of Cuyahoga County until 11 a. m., Oct. 25, for grading, draining and otherwise improving South Woodland Road No. 2, from the Warrensville Center Road to Newburg City, in Cleveland Heights and Warrensville Townships, in accordance with the form of contract and specifications to be furnished by Frank R. Lander, County Surv. J. F. Goldenbogen is Clk. Comrs.

+Medina, Ohio.—We are officially advised that the contract for grading and macadamizing one mile of road in Medina and Brunswick Counties was awarded on Sept. 6 to the KENNEDY & WARNER CO., at $9,100. Noted Sept. 14.

Fremont, Ohio.—Bids will be received at the office of the Commissioners of Sandusky County, until 10 a. m., Oct. 19, for grading and macadamizing 1.66 miles of road in Sandusky and Rice Townships. Specifications, plans and profiles are on file in the office of the County Commissioners Fremont, and at the State Highway Department. Estimated cost of construction, $16,059.

Lisbon, Ohio.—Bids will be received at the office of the Commissioners of Columbian County until 10 a. m., Oct. 17, for grading and paving with brick 1.06 miles of road in Elkrun Township. Specifications, plans and profiles are on file in the office of the County Commissioners in Lisbon, and at the State Highway Department. Estimated cost of construction $13,370.

+Hartford (Croton Post-Office), Ohio. —The contract for constructing 4,000 sq. yds. of bituminous concrete pavement and 8,600 sq. yds. macadam pavement with oil binder, has been awarded to NATIONAL CO., South Bend, Ind., at $1.48 per sq. yd. Noted Sept. 21.

Upper Sandusky, Ohio.—Bids will be received at the office of the Commissioners of Wyandot County, until noon, Oct. 18, for grading and macadamizing two miles of road in Marseilles Township. Specifications, plans and profiles are on file in the office of the County Commissioners in Upper Sandusky, and at the State Highway Department. Estimated cost of construction, $12,769.

Warren, Ohio.—Bids will be received at the office of the Commissioners of Trumbull County, until 10 a. m., Oct. 14, for grading and paving with concrete 2.69 miles of road in Hartford Township. Specifications, plans and profiles are on file in the office of the County Commissioners in Warren, and at the State Highway Department. Estimated cost of construction, $16,420.

Zanesville, Ohio.—Bids will be received by the Commissioners of Muskingum County, until Oct. 11, for grading and macadamizing .606 miles of road in Union Township under the provisions of the state aid law. The estimated cost of the work is $4,646. Copies of the specifications can be obtained at the office of the County Commissioners. James R. Marker is State Highway Comr.

Jasper, Ind.—The Commissioners of Dubois County will receive bids until 10 a. m., Nov. 6, for the construction of a stone road, 2½ miles long, in Columbia Township. M. A. Sweeney is Audr.

Terre Haute, Ind.—The Commissioners of Vigo County are preparing to ask for bids for the construction of a gravel road on line between Pierson and Riley Townships, known as the John Fox Road. The road will be two miles long.

+Freeport, Ill.—We are officially advised that a contract for paving with waterbound macadam and constructing combined curb and gutter, was awarded on Sept. 21 to the Guno-Graham Co., Freeport, at $19,000.

Peoria, Ill.—The contract for paving a portion of South Adams St. with cresote wood block has been awarded to the A. D. THOMPSON CO., Peoria, at $12,250.

West Allis, Wis.—A contract will soon be awarded for macadamizing National ave. from 51st to 75th Ave.

+Green Bay, Wis.—We are officially advised that the contracts for paving with macadam Main St. and Broadway were awarded on Sept. 25 to the McGRATH CONSTRUCTION CO., at $8,029 and $4,269. The only other bid received was submitted by John Brogan, at $8,500 and $4,500, respectively. Noted Sept. 21.

Milwaukee, Wis.—Bids will be received until Oct. 7 by Harry E. Briggs, Comr. Pub. Wks., for laying a stone block pavement on Clinton St., from South Water to Oregon St., approximately 1,752 sq. yds.

Cedar Rapids, Iowa.—We are officially advised that bids for street improvements have been received as follows: (a) paving, (b) curb and gutter, (c) sidewalk: Concrete Construc- Co., (a) $2,450, (b) $1,459, (c) $4,981; Dearborn & Jackson, (a) $2,580, (b) $1,264; Smith Bros., (a) $2,505, (b) $1,340, (c) $5,323. All the contractors are of Cedar Rapids. L. J. Storey is City Clk. Noted Sept. 21.

Spencer, Iowa.—Bids will be received by R. T. Turner, City Clk., until Oct. 6, for constructing about 20,000 lin. ft. of sidewalk.

+Leavenworth, Kan.—Contracts for street improvement have been awarded as follows: For paving Pottawatomie St. from Fifth St. to Broadway, to McGUIRE & STANTON, at $9,079; for curbing Vine St. from Fourth to Second Ave. and Fifth St. from Arch to Vine St., to FRED TARRY & SON, at 30 2-5 cts. per lin. ft.; for constructing granitoid sidewalks on Fifth St. to W. F. EDGELL, at 11¾ cts. per sq. ft. for concrete, and 4 cts. per sq. ft. for reinforcement.

Linneus, Mo.—Bids will be received by the Board of Aldermen until Oct. 6 for constructing cement sidewalbs in various streets. J. H. Phillips is Street Comr.

Sedalia, Mo.—Bids will be received by the Court of Pettis County until noon, Oct. 9, for the construction of 9½ miles of rock road. Plans and specifications are on file with the County Highway Engineer, Sedalia.

+Little Rock, Ark.—A contract for paving seven blocks of Washington Ave. has been awarded to the TEXARKANA CRESOTE PLANT.

Harlingen, Tex.—See item under Water Supply—Irrigation.

Temple, Tex.—A contract will soon be awarded for paving Adams Ave. from Main St. to the railroad station, a distance of eight blocks.

Sanderson, Tex.—Bids will be received by the Board of Commissioners of Terrell County until noon, Nov. 13, for constructing about 1,840 lin. ft. of concrete curb or wall. J. B. Ross is County Judge.

Denver, Colo.—Bids will be received by the Board of Public Works until 11 a. m., Oct. 5, for furnishing the necessary labor and material for the construction of concrete curb and gutter and otherwise improving East Side Improvement District No. 3. Henry Read is Pres. Bd.

+Pasco, Wash.—A contract for paving nine blocks of streets has been awarded to the PACIFIC PAVING CO., at $43,737.

+Seattle, Wash.—A contract for grading 15th Ave. and planking Rainier Ave., has been awarded to L. H. GOERIG at approximately $32,000.

+A contract for grading Green Lake Boulevard between Woodland Park and the northern end of Green Lake has ben awarded to S. NORMILE & TIMOTHY RYAN, at 38 cts. per cu. yd. The contract calls for a fill of 116,000 cu. yds.

Stockton, Cal.—Bids for improving four miles of Linden Road have been received by the Board of Supervisors as follows: A. B. Munson & Son, $7,910; Frank McIntyre, $7,359; Cy Moreing & Sons, $8,486.

Covina, Cal.—Floyd T. Dessery, City Engr., Union Trust Bldg., Los Angeles, is preparing plans and specifications for the improvement of Orange Ave. and other streets. The work will consist of oil macadam paving, concrete curbs and gutters. Bids for the work will be received about Nov. 1.

+Los Angeles, Cal.—TRYON & BRAIN, Merchants Trust Bldg., have been awarded a contract at $300,000 for the street work in the Windsor Square tract fronting on Wilshire Boulevard. Improvements will include grading, paving, sidewalks, curbs and gutters.

Pasadena, Cal.—Bids will be received by Clarence O. Day, Engr., Boston Bldg., until Oct. 10 for the improvement of the Altadena Country Club Park tract. The estimated cost of the improvements is $20,000, and will consist of grading and paving 5,000 ft. of roadway and the construction of cement curbs and gutters.

+El Centro, Cal.—ROBERT SHERER & CO., Los Angeles, have been awarded a contract for grading 5& miles of roadbed westward from Seely for the San Diego & Arizona R. R. Co.

MANUFACTURING PLANTS.

(*+Denotes a contract awarded.)*

Fall River, Mass.—It is probable that a mill with a capacity of 35,000 spindles will be built by the Lincoln Manufacturing Co. at Fall River.

Holyoke, Mass.—The Merrimack Lumber Co. will erect a mill on Appleton St. Ellsworth & Howes are Archs.

+Lowell, Mass.—The contract for the manufacturing plant for Jos. C. Donovan, Market St., to be erected on Palmer and Market Sts., has been awarded to E. G. TOUHEY, 40 Middlesex St. The estimated cost is $25,000. J. S. Roach, 40 Middlesex St., is the Arch. The structure will be two stories high, 80 × 50 ft., and of brick construction.

+Willimansett, Mass.—The contract for the addition to the plant of the Coburn Trolley Track Co. at Willimansett has been awarded to L. F. JONES. The structure will be 84 × 53 ft. of brick and concrete construction. JOHN MORGAN & SON have the contract for mason work. E. & E. N. Spalding, Suffield, Conn., are the Archs.

Pawtucket, R. I.—The Lorraine Manufacturing Co. is contemplating the erection of a 3-story, 150 × 63-ft. brick building to be used as a machine shop at its plant. The estimated cost is $35,000.

New Britain, Conn.—It is reported that the Russell & Erwin Manufacturing Co. is taking steps to erect a 7-story reinforced-concrete factory on Washington St. B. A. Hawley is Pres.

Albany, N. Y.—The Albany Saw Works Co. has been incorporated with a capital of $50,000, and will erect a plant for the manufacture of saws of all kinds. The directors are E. F. and E. L. Decker and H. H. Mills, Albany.

Albion, N. Y.—It is reported that Joseph A. Morrow is contemplating enlarging his plant by the erection of a 3-story building, 75 × 200-ft.

Buffalo, N. Y.—The Webster Citizens Ice Company is receiving bids for a 2-story storage house, 70 × 85 ft., to be erected adjoining its ice manufacturing plant on Chenango St.

+The contract for constructing a fireproof factory, 60 × 112 ft., 1-story, to be erected at Seneca and Griffin Sts., has been awarded by the National Carbonic Acid Co. to B. I. CROOKER & CO. Alfred E. Baxter, Engineering Co., 915 Ellicott Sq. Bldg., are Archs.

New York, N. Y.—Bids will be received by Michael J. Drummond, Comr. of Pub Charities, until Oct. 13, for new laundry machinery and appliances at the Kings County Hospital, Borough of Brooklyn.

Press reports are to the effect that a factory building is to be erected at Eighth St. and Kent Ave., Borough of Brooklyn, by the General Kompolite Co., for the manufacture of cement floors and tiling. The estimated cost is $50,000.

Rochester, N. Y.—The Rochester Stamping Co., 141 Jones St., has awarded a contract to the INDUSTRIAL ENGINEERING CO., 30 Church St., New York, for the construction of a 4-story and basement factory building, 60 × 109 ft., to be erected on Saratoga Ave. Plans have been prepared by John W. Vickery, Arch.

+St. Johnsville, N. Y.—The contract for the construction of a 3-story, 42 × 230 ft., addition to its knitting mill plant, has been awarded by the Union Mills Co. to STEPHEN HINES, Herkimer, at $24,000.

Syracuse, N. Y.—The Syracuse Ornamental Co., 581 South Clinton St., is having plans prepared for a factory building, which will be erected early next spring. Adolph M. Holstein is Pres.

Camden, N. J.—Plans have been prepared by Sauer & Hahn, 1118 Chestnut St., Philadelphia, Pa., for the construction of a silk mill, to be erected at Camden, for the American Artificial Silk Manufacturing Co. The structure will be 4 stories high, 72 × 180 ft., of brick and concrete construction. The estimated cost is $350,000. Bids will be received in about two weeks. Noted Aug. 24.

Laurel Mills, Va.—Plans are being prepared by Fred S. Hinds, Boston, Mass., for the plant to be erected by the Rappahannock Woolen Mills Co. at Laurel Mills.

High Point, N. C.—J. E. Mills and associates have organized the Ebony Mills Co. with a capital of $125,000. The company will erect a plant at High Point for the manufacture of knit hosiery.

Newton, N. C.—The Fidelity Hosiery Mills Co. will erect a new plant at Newton. The building will be a 2-story structure, 60 × 100 ft.

Orangeburg, S. C.—The Orange Cotton Mills will install new machinery in its plant. G. H. Cornelson is Pres.

+Barnesville, Ga.—The contract for the erection of a 2-story addition, 100 × 60 ft., has been awarded by the Aldora Mills to PIKE BROS., La Grange, at $18,000.

+Rome, Ga.—The contract for constructing the enlargement of the plant of the Anchor Duck Mills has been awarded to J. F. DUPREE & SON, Rome. The estimated cost is $40,000.

Birmingham, Ala.—The Scheiber Concrete Roof Tile Co. has been incorporated with a capital of $100,000, with offices at 319 Chamber of Commerce Bldg. A plant will be erected at E. Birmingham in the near future for the manufacture of concrete roofing shingles. The officers are W. A. Biles, Pres.; Arthur B. Biles, Secy.; W. J. Conniff, Attorney.

Franklin, Ky.—The Franklin Woolen Mills Co. will rebuild its plant at Franklin, which was destroyed by fire.

Cincinnati, Ohio.—J. M. Baker, Arch., Cincinnati, has prepared plans for the construction of a factory for the Hetzell Gelatine Product Co., to be erected on Deerfield Ave. The structure will be 2-stories high, 160 × 150 ft.

California, Ohio.—The car barns of the Interurban Railway & Terminal Co. were destroyed by fire. The building will be rebuilt.

+Cleveland, Ohio.—Mather & Waechter Co. have awarded the contract for the erection of an office and factory building at 105th St., to the FATH CONSTRUCTION CO., Cleveland.

+Dayton, Ohio.—The contract has been awarded to the ROCHE BRUNER BUILDING CO., Johnson Bldg., Cincinnati, Ohio, for a $100,000 convention hall for the National Cash Register Co.

+Defiance, Ohio.—The contract for the erection of an addition to the plant of the Defiance Pressed Steel Co. has been awarded to P. A. BAKER & BRO., at $25,000.

Edgemont (Cincinnati Post-Office), **Ohio.**—It is reported that the Ohmer Fare Register Co. will erect a factory on the site which it purchased at Edgemont.

Hamlet, Ohio.—Henry Perin and A. Mellen have purchased a site at Hamlet. They will erect a broom factory.

Newcomerstown, Ohio.—L. E. Shull, of the Shull Steel Co., is interested in a company which contemplates the erection of a radiation plant here.

Portsmouth, Ohio.—The New Era Gas Engine Co. will remove its plant from Dayton to Portsmouth. A building will probably be erected.

Toledo, Ohio.—It is reported that A. C. Berry, representing Pittsburgh capitalists, has purchased 27 acres in Toledo on which will be erected a plant for the manufacture of automobile parts. The cost is about $200,000.

Woodville, Ohio.—The plant of the Woodville Lime & Cement Co., Woodville, was destroyed by fire, entailing a loss of $159,000. The plant will be reconstructed.

Brightwood, Ind.—It is reported that the shops of the Cleveland, Cincinnati, Chicago & St. Louis R. R., at Brightwood, Indianapolis, recently burned, will be rebuilt, as the removal of the machinery to the Beech Grove yards has been contemplated for some time.

Alpena, Mich.—The National Turpentine Co., Cleveland, will probably erect a plant at Alpena.

+Detroit, Mich.—John Scott & Co., 1603 Ford Bldg., have awarded the following contracts for the 2-story factory addition, 50 × 50 ft., and 80 × 150 ft., for the Schmied-Sisman Co., 385 Beaufait St.: Masonry let to CORRICK BROS., 809 Stanley Ave. The owners will do carpentry work. The estimated cost is $40,000. Noted Sept. 14.

+Nettelton & Weaver, 1405 Penobscot Bldg., have awarded the general contract for the 3-story factory building, 50 × 75 ft., for the Superior Cigar Mfg. Co., 265 Jefferson Ave. General contract let to F. J. WHITNEY, 1443 Grand River Ave. The estimated cost is $25,000.

J. L. Ross, 9 Center St., is having plans prepared for a 2- and 3-story addition, 31 × 100 ft., to his present factory. Owner will purchase materials and sublet all contracts.

+Smith, Hinchman & Grylls, 710 Washington Arcade Bldg., have awarded the following contracts for the reinforced 1-story factory building, 60 × 64 ft., and the 2-story office building, 31 × 72 ft., for the Heneshoff Motor Co., Woodward and Belmont Ave.: Structural iron work, let to WHITEHEAD & KALES, Beecher Ave. and Michigan Central Railroad; masonry to GEO. D. NUTT, 179 Lothrop Ave.; carpentry, to JAMES MOYNES & CO., 759 Beaufait St.; plumbing to J. ZERGA, 78 Larned St. West; plastering to the VINTON CO., 120 Woodbridge St. East. The estimated cost is $35,000. Noted Sept. 21.

James Hamilton, R. F. D. No. 3, Pontiac, Mich., is having plans prepared for a 2-story factory and office building, 64 × 41 ft., and 72 × 30 ft., to be erected on Woodward Ave. Owner will purchase materials and sublet contracts. The estimated cost is $30,000.

Grand Rapids, Mich.—The planing mills of the Fuller & Rice Lumber Co. were destroyed by fire, entailing a loss of about $250,000. The plant will be rebuilt.

Sebewaing, Mich.—The Directors of the Michigan Sugar Co. have decided to enlarge the Sebewaing plant, increasing its capacity from 600 to 1,000 tons of beets per day.

Chicago, Ill.—It is reported that the Lake Shore & Michigan Southern Ry. Co. has taken out a building permit at Chicago covering the erection of a 1-story roundhouse, to cost approximately $124,000.

Merrill, Wis.—C. F. Hankwitz is negotiating for the purchase of a site preparatory to constructing a factory to manufacture broom and shovel handles.

Milwaukee, Wis.—Andrew Kopperud, manufacturer of well drilling machinery, has purchased a site of two acres on 39th Ave., near Lapham St., for a new plant. The structure will be 60 × 150 ft., of reinforced-concrete and brick construction, to cost $25,000.

The Pfister & Vogel Leather Co. has purchased a 20-acre site at South Milwaukee and proposes to erect a $50,000 patent leather and finishing plant. Fred Vogel, Jr., is Pres.

Kirchhoff & Rose, Archs., Majestic Bldg., are preparing plans for a $35,000 artificial ice manufacturing plant to be erected for the Jos. Schlitz Brewing Co. at First and Walnut Sts. It will be two stories high, 150 × 165 ft., with a 65 ft. wing, of reinforced-concrete, steel and brick construction.

Webster City, Iowa.—The stockholders of the National Sewer Pipe & Tile Co. have organized with a capital of $250,000, to manufacture sewer pipe. W. C. Kirkpatrick is preparing plans for the construction of a plant to cost approximately $197,880.

Wykoff, Minn.—It is reported that J. J. Walker and F. D. Prosser are contemplating the erection of a 25,000-bu. elevator.

+St. Paul, Minn.—The contract for the construction of the reinforced-concrete factory and stables for Haynes Bread Co., at University Ave. and Marion St., has been awarded to J. W. BUTLER & BRO., 508 Baltimore Block. Downs & Eads are Arch. Cost, $40,000.

+St. Louis, Mo.—Contracts have been awarded by the American Furnace Co. for the erection of a 2-story factory building on Morgan St. The estimated cost is $42,000. Plans have been prepared by J. M. Dunham, Arch.

St. Louis, Mo.—Plans have been prepared by O. J. Wilhelmi, 406 Market St., for the 2-story brick and stone 100 × 225 ft. factory to be erected by the Missouri Belting Co. at Grand and La Salle Sts. The building will be 100 × 225 ft., and equipped for the manufacture of leather belting. The estimated cost is $75,000.

The Automatic Register Co. is contemplating the erection of a factory in St. Louis. W. P. Launtz, East St. Louis, Ill., is interested.

It is reported that a number of shoe manufacturers are planning the erection of a shoe factory at St. Louis. The Roberts, Johnson & Rand Shoe Co. Frank C. Rand, Vice-Pres., is interested.

Bay City, Tex.—Haas & Sons, Sherman, will establish a factory at Bay City for the manufacture of wooden handles of various kinds.

El Paso, Tex.—Dr. F. S. Pearson and associates have been donated a site at El Paso for their proposed paper mills and box factory.

Ione, Wash.—W. F. Bryam & Sons will erect a shingle mill at Ione with a capacity of 100,000 shingles per day.

+Millwood, Wash.—The International Portland Cement Co. has awarded a contract to the FULLER ENGINEERING CO., Allentown, Pa., for the erection of a 2000-bbl. mill at Millwood. Cost, $1,000,000.

+Seattle, Wash.—The contract for the erection of a 6-story reinforced-concrete building for the Diamond Ice Co. on Western Ave. and University St. has been awarded to MARK ODELL, Henry Bldg., at $150,000.

Longbeach, Cal.—The California Glass Insulator Co. has purchased a site at Long Beach for the erection of a glass factory to cost $45,000.

Oxnard, Cal.—The Dunn Manufacturing Co. is planning the erection of a plant in Oxnard.

Port Hartford, Cal.—The Palmer Oil Co. will construct an asphalt plant in the near future, to have a capacity of 1,000 barrels of oil daily.

Santa Ana, Cal.—James McFadden, Vice-Tres. of the Santa Ana Co-operative Sugar Co., awarded a contract to $512,000 for the construction of a sugar factory three miles south of the DYER CO., of Cleveland, Ohio, at Santa Ana, on the Southern Pacific R. R. The plant will have a daily capacity of 600 tons. The main structure will be three stories in height; other buildings will be a boiler house, kiln house, machine shop and storage house. The construction will be of reinforced concrete.

Bridgeburg, Ont.—The Lautz Marble Co., Buffalo, N. Y., will build a branch plant for its Canadian business on Janet St. and the Michigan Central R. R. The plant, complete, will cost about $35,000.

+Port Arthur, Ont.—The contract for the construction of the Port Arthur Match Factory has been awarded to GEORGE OTTO. The estimated cost is $28,500.

Toronto, Ont.—A permit has been issued for the construction of a 2-story brick addition to the Bredin factory of the Canadian Bread Co. at Bloor and Dundas Sts. The estimated cost is $30,000.

MISCELLANEOUS CONTRACTS.

(***Denotes that this work is advertised in Engineering News.***)

U. S. RECLAMATION SERVICE.—All news concerning canal and Irrigation projects, etc., will be found under Water Supply—Irrigation.

+Fire Station.—Lowell, Mass.—The contract for the fire station to be built at the corner of Race and Merrimack Sts., has been awarded to E. C. TWOHEY, 16 Madison St., Lowell. The building will be of brick, two stories, 77 × 32 ft., and will cost $20,000. Harry P. Graves, 40 Middlesex St., is the Arch.

Refilling.—Boston, Mass.—The contract for excavating and refilling tree pits on Charles River embankment has been awarded by the Metropolitan Park Comrs. to COLEMAN BROS., Chelsea, Mass., at $10,005. Other bids were: James H. Fannon, Somerville, $10,430; Michael H. Norton, $10,530; John McCourt & Co., $11,650; John Kelley Co., $12,700. John R. Rablin is Ch. Engr. Comr.

+Breakwater Extension.—Buffalo, N. Y.—The contract for breakwater extension at Cape Vincent, N. Y., has been awarded to the INLAND WATERWAYS CO., of Ashtabula, Ohio, at $28,201. Bids were opened on Sept. 1 by Col. J. G. Warren, Corps Engrs., U. S. A., Buffalo. List of bidders noted on Sept. 21.

River and Creek Improvement.—Herkimer, N. Y.—The bids received by Charles C. Treman, Supt. Pub. Wks., on Sept. 26, for the improvement of the channel and banks of West Canada Creek and the Mohawk River at Herkimer were: Lathrop, Shea & Henwood Co., 324 Ellicott Sq., Buffalo, N. Y., $69,430; B. F. Mulder and M. F. Dollard, Albany, $83,000; Aetna Engineering & Contracting Co., Herkimer, $112,700. Engineer's estimate, $66,500.

Road Binder.—New York, N. Y.—Bids will be received by George Cromwell, Pres. Boro. Richmond, until noon Oct. 10, for furnishing all the labor and materials required for furnishing and delivering 50,000 gallons of macadam road binder with asphalt base.

White Lead.—New York, N. Y.—Bids will be received by Arthur J. O'Keefe, Comr. of Bridges, until 2 p. m., Oct. 11, for furnishing and delivering white lead to the Brooklyn Bridge.

Fire Protection, Etc.—New York, N. Y.—Bids will be received by the Board of Health, Dept. of Health, until 10 a. m., Oct. 16, for furnishing all the labor and materials necessary or required to install and complete fire alarm systems throughout the premises of the Kingston Ave. Hospital, Kingston Ave. and Fenimore St., Boro. Brooklyn, and throughout the premises of the Tuberculosis Sanitarium at Otisville, Orange County, N. Y., and for furnishing and delivering fire protection equipment and apparatus to the Willard Parker, Riverside and Kingston Ave. Hospitals of the Department of Health in the City of New York, and to the Tuberculosis Sanitarium at Otisville during the year 1911.

Elevators, Etc.—New York, N. Y.—Bids will be received until 3 p. m., Oct. 16, by C. B. J. Snyder, Supt. School Bldgs., Dept. of Education, New York, for installing electric elevators and ash hoist, and installing bindery equipment in the Washington Irving High School, on the easterly side of Irving Pl., between 16th and 17th St., Bor. Manhattan.

Fire Hose.—New York, N. Y.—Bids will be received until 10.30 a. m., Oct. 16, by Joseph Johnson, Fire Comr., for furnishing and delivering 9,500 ft. of 2½ in. circular solid-woven, multiple-cotton, rubber-lined fire hose, and 18,500 ft. of 3-in. circular solid-woven, multiple-cotton, rubber-lined fire hose.

Fire Alarm System.—Syracuse, N. Y.—Plans and specifications for extending the underground service of the city's fire alarm telegraph system have been submitted to H. E. Hessler, Comr. Pub. Safety, by E. A. Fitzgerald, John J. Halloran, Clk. Bd. Contract and Supply, will soon ask for bids.

Power Boats.—Tompkinsville, N. Y.—Bids will be received until 3 p. m., Oct. 5, by the Inspector, Third Light House District, Tompkinsville, for furnishing six 24-ft. power boats complete.

Gateway.—Pittsburgh, Pa.—An ornamental gateway to the city will be built by the Pittsburgh & Lake Erie R. R. Co. The plans call for the entire reconstruction of the present entrance to the station and of the approach thereto, and for the erection of a large glass-roofed canopy that will cover the entire width of Smithfield St., including the two sidewalks in front of the depot. The canopy over Smithfield St. will be 40 × 80 ft. and about 30 ft. high. It will rest on four large ornamental iron posts, each 20 ft. high, the height of the clear space beneath the top. The canopy proper will have four gables, each ten feet high. The framework will be of iron, and all of the exposed parts will be of copper, worked into ornamental designs. The roof will be of glass. In each of the two gables facing the street there will be a large clock, electrically controlled. J. A. Atwood is Ch. Engr.

Dredging.—Wilmington, Del.—Bids will be received by Maj. R. R. Raymond, Corps Engrs., U. S. A., Wilmington, until Oct. 23, for dredging Double Creek, N. J.

***Jetty Construction.**—Wilmington, Del.—Bids will be received until 11 A. M., Oct. 30, by Major R. R. Raymond, Corps Engineers., U. S. A., Wilmington, for jetty construction at the mouth of Mantua Creek, N. J.

Stables.—Baltimore, Md.—The Architectural Commission has approved the plans of T. G. Carroll, Arch., for stables for the Street Cleaning Department at Greenmount Ave., near North Ave. and on Ridgely St.; for a gatehouse at the Ashburton Reservoir. Estimated cost, $45,000.

Wire Cloth, Rivets.—Washington, D. C.—Bids will be received until Oct. 10 by the Bureau of Supplies and Accounts, Navy Dept., Washington, for furnishing at the navy yards and naval stations, supplies as follows: Puget Sound, Wash., Schedule 3927, miscellaneous steel wire cloth; Pearl Harbor, H. T., Schedule 3928, 500,000 lbs. Norway iron rivets, 43,177 sq. ft. asbestos corrugated roofing, 354,063 sq. ft. galvanized sheet steel, 1,300 lbs. copper wire.

Forgings.—Washington, D. C.—Bids were received as follows on Sept. 27 by the Bureau of Ordnance, Navy Dept., Washington, for furnishing 20 sets of 14-in. and 53 sets of 5-in. forgings: Midvale Steel Co., Philadelphia, and Bethlehem Steel Co., South Bethlehem, Pa., each bid 21 cts. per lb. for plain steel and 30 cts. for nickel steel. The Crucible Steel Co. of America, Pittsburgh, Pa., bid the same price on nine sets of 5-in. forgings only.

+Pontoon Sheds.—Washington Barracks (Washington post-office, D. C.—The contract for constructing a pontoon shed at Washington Barracks, bids opened on Sept. 5, has been awarded to M. F. PIRER, of Washington, D. C., at $14,785, electric lighting omitted.

Wire.—Washington, D. C.—Bids will be received until Oct. 17 by the Bureau of Supplies and Accounts, Navy Dept., Washington, for 9,000 ft. of rubber-covered and 18,000 ft. of weather-proof wire, Schedule 3,935.

Wire.—Washington, D. C.—Bids will be received until Oct. 12 by Capt, R. J. Burt, Signal Corps, U. S. A., Disbursing Officer, Washington, for furnishing 15 miles of galvanized wire, steel, No. 6, Proposal No. 550; 240 miles of galvanized wire, iron, No. 15, and 18,000 ft. of wire, phosphor bronze, 7-strand, No. 14.

Dredging.—Washington, D. C.—The following bids were received by Lt. Col. W. C. Langfitt, Corps Engrs., U. S. A., Washington, on Sept. 27 for dredging the upper Machodoc Creek, Va.: W. H. French, Norfolk, Va., 19 cts. per cu. yd.; Miner Engineering Co., Washington, 14.8 cts.; Maryland Dredging & Contracting Co., Baltimore, Md., 16½ cts.

Cranes.—Washington, D. C.—Bids were received as follows on Sept. 30 by the Bureau of Yards and Docks, Navy Dept., Washington, for furnishing two 15-ton locomotive jib cranes at the navy yards at Norfolk and Mare Island, Cal. Item 1 on government specifications, Item 2, bidder's specifications: Ohio Locomotive Crane Co., Bucyrus, Ohio, (2) $12,135; Brown Hoisting Machinery Co., Cleveland, Ohio, (1) $13,200; McMyler Interstate Co., Bedford, Ohio, (2) $13,573; American Hoist & Derrick Co., St. Paul, Minn., (2) $17,615; Browning Engineering Co., Cleveland, Ohio, (1) $11,108, (2) $10,598; Orton & Steinbrenner, 610 Dearborn St., Chicago, Ill., (2) $12,868, alternate $12,252; Industrial Works, Bay City, Mich., (1) $15,175.

Seawall.—Norfolk, Va.—Bids were received as follows on Sept. 30, by the Bureau of Yards and Docks, Navy Dept., Washington, D. C., for the construction of a seawall at the navy yard, Norfolk: Item (1) construction of about 384 ft. of sea wall; (2) construction of about 66 ft., additional; (3) price per lin. ft., under Item (1); (4) price per lin ft., under Item (2). McHarg Barton Co., 165 Broadway, New York, (1) $93,000; (2) $15,000; (3) $240; (4) $230. W. L. Miller, Boston, Mass., (1) $92,500; (2) $15,500; (3) $245; (4) $250. Hennebeque Construction Co., New York, (1) $88,670; (2) $15,830; (3) $239; (4) $229. Alsop Pierce Co., Newport News, Va., (1) $97,152; (2) $16,698; (3) $253; (4) $253.

Crane Track.—Norfolk, Va.—Bids were received as follows on Sept. 30, by the Bureau of Yards and Docks, Navy Dept., Washington, D. C., for the renewal of track for 40-ton crane track at the Navy Yard, Norfolk, Va.: Alsop & Pierce, Newport News, Va., Item (1) $21,300; (2) $30. C. M. Leach, Boston, Mass., (1) $19,683; (2) $28. Sanford & Brooks, Baltimore, (1) $19,733; (2) $28.25. Item (1) 700 ft. of track; (2) price per ft. of track.

Dredge.—Wheeling, W. Va.—Bids were opened on Sept. 22 by F. W. Alstaetter, Corps Engrs., U. S. A., Wheeling, for constructing and delivering steel hull dipper dredge "Col. M. B. Adams," with machinery, fittings, etc., as follows: The Marion Steam Shovel Co., Marion, Ohio, $43,500; The Bucyrus Co., South Milwaukee, Wis., $55,000, in accordance with bidder's specification, $55,000 and $56,200.

***Canal Work.**—Charleston, S. C.—Bids will be received until noon, Oct. 27, by Maj. G. P. Howell, Corps Engrs., U. S. A., Charleston, for dredging canal between Charleston and McClellanville, S. C. Advertised last week.

Locktenders' Houses.—Mobile, Ala.—George Vise, of McDowell, Ala., has been recommended for award of contract for constructing four locktenders' houses, Nos. 5, 7, 8 and 9, Black Warrior River, Ala., at $11,004. Bids were opened on Sept. 14 by Maj. C. A. F. Flagler, Corps Engrs., U. S. A., Mobile.

***Lock Gates Dam.**—Vicksburg, Miss.—Bids will be received until noon, Oct. 31, by Capt. T. A. Woodruff, Corps Engineers, U. S. A., Vicksburg, for furnishing and placing lock gates and building dam, for Lock and Dam No. 6, Ouachita River, near Roland Raft, Ark.

+Pneumatic Tube Service.—Cincinnati, Ohio.—The contract for pneumatic tube service in the U. S. post-office here has been awarded to the UNIVERSAL PNEUMATIC TRANSMISSION CO., of Chicago, Ill. Noted on Sept. 7.

Asphalt Cement, . Etc.—Cleveland, Ohio.—Bids will be received by A. B. Lea, Dir. Pub. Ser., until Oct. 9, for asphalt cement, asphalt tandem steam roller and a portable asphalt mixing plant. All bids must be made in accordance with the specifications, which may be obtained from the Superintendent of Streets, 310 Superior Ave. N. E.

Cable.—Columbus, Ohio.—Bids will be received until Oct. 6 by E. L. McCune, Dir. Pub. Ser. for furnishing f. o. b. cars, Columbus, 8,936 ft. of 20, 15, 10 and 5-pair lead-covered underground cable.

Cement, Etc.—Toledo, Ohio.—Bids will be received until Oct. 6 by the Board of Park Commissioners for furnishing Portland cement, concrete, sand, reinforcing steel rods and lumber.

Dredging.—Chicago, Ill.—Bids were received on Sept. 14 by the Sanitary District of Chicago for dredging and disposing of material, 94,262 cu. yds., scow measurement, in the east and west arms of the south fork of the south fork of the south branch of the Chicago River: (a) price per cu. yd., (b) totals: Great Lakes Dredge & Dock Co., Chicago, (a) 43.9 cts., (b) $41,381; Fitz-Simmons & Connell Dredge & Dock Co., Chicago, (a) 50 cts., (b) $47,131.

***Channel Excavation.**—Chicago, Ill.—Bids for excavation and collateral work on Contract-Section 2 of the Calumet-Sag Channel will be received by I. J. Bryan, Clk. Sanitary District of Chicago, at the office of the District, American Trust Bldg., Chicago, until noon, Oct. 5. The work consists of the excavation and collateral work on Contract Section 2 of the Calumet-Sag Channel of the Sanitary District of Chicago, in the Townships of Palos and Lemont, Ill. The approximate quantities for the comparison of bids are: (a) 221,000 cu. yds. of glacial drift, (b) 351,000 cu. yds. of rock excavation, (c) 313,000 sq. ft. of channeling, (d) 3,200 cu. yds. of concrete retaining wall, (e) 1,100 cu. yds. of dry rubble wall. Specifications and plan may be obtained upon application at the office of the District. Advertised last week.

Bathing Pavilion.—Milwaukee, Wis.—Harry E. Briggs, Comr. Pub. Wks., will receive bids until Oct. 5 for the construction of a public bathing pavilion in South Shore Park, Rusk and Beulah Aves., to cost approximately $12,000.

Asphalt.—Superior, Wis.—See item under Streets and Roads.

Tile Drains.—Buffalo Center, Iowa.—Bids will be received until 11 a. m., Oct. 18, by the Joint Board of Supervisors of Winnebago and Kossuth Counties, First National Bank Bldg., Buffalo Center, for 5,500 ft. of 24-in., 4,200 ft. 22-in., 1,600 ft. 20-in., 3,800 ft. 15-in., 5,200 ft. 14-in., 5,600 ft. 12-in., 1,738 ft. 10-in., 7,341 ft. 8-in., 307 ft. 7-in., and 4,064 ft. 6-in tile drains. Bids must be per 100 ft., complete, including one concrete headwall for tile outlet.

+Ditches.—Red Lake Falls, Minn.—The Board of Commissioners of Red Lake County has awarded the contract to the NORTHWESTERN DRAINAGE CO., of Thief River Falls, Minn., for the construction of ditches Nos. 53 and 55.

+Dredging.—Fairmount, Minn.—CLYDE A. WALB of Lagrange, Ind., has been awarded a contract for 15 miles of dredging near Fairmount at $34,800.

+Ditch.—Badger, Minn.—The contract for the construction of Ditch No. 10 has been awarded, it is reported, to the KOHLER CONTRACTING CO., of Little Falls, Minn., at 12 cts. per cu. yd., and $70 a mile for leveling road; total, $21,461.

+Ditch.—Mankato, Minn.—Contracts for constructing ditches Nos. 26 and 27 have been awarded to G. D. GILBERTSON, of St. James, Minn., at $7,600 and $18,950, respectively.

+Ditch.—Willmar, Minn.—The contracts for constructing Judicial Ditch No. 61 has been awarded by John Feig, County Audr., to P. J. HALEY, of Willmar, for excavating 83,145 cu. yds., at $11,807, and for tile work, 31,000 ft. to PAUL PAULSON, of Cottonwood, Minn., at $5,681.

Ditch.—Colfax, Neb.—Bids will be received until Oct. 10 by the Board of Dodge County Supervisors for the construction of the John O'Hare and others ditch to be about 2½ miles long, 6-ft. wide at the bottom, side slopes ½ to 1 and including about 22,000 cu. yds. I. W. Funk is County Surv.

Drainage.—Osceola, Ark.—The Morgan Engineering Co., of Memphis, Tenn., is preparing plans for the construction of a drainage system in Mississippi County. Estimated cost, about $1,250,000. Bids will be received until Dec. 1.

***Drainage Canal.**—Pine Bluff, Ark.—Bids will be received by the Comissioners of Drainage District No. 3, W. C. Hudson, Secy., Jefferson County, Ark., at the office of Bridges & Wooldridge, Attys., Pine Bluff, until noon, Oct. 16, for the construction of a drainage canal, including about 8⅓ miles of main canal and 265,000 cu. yds. of excavation. White & Watson are Engrs., Pine Bluff.

Levee.—Garland, Ark.—Miller County Levee District No. 2, N. H. Williamson, Secy., Texarkana, Ark., will let the contract soon for constructing from 38 to 41 miles of levee on the west bank of the Red River.

Levee.—Dallas, Tex.—The Trinity Valley Produce Co., it is reported, has awarded the contract to GOODE & McENROE, at about $25,000 for constructing seven miles of levee around a farm of 3,265 acres between Elm and West Forks of the Trinity River.

Storage Tanks.—Port Aransas, Tex.—The Texas Co., of Houston, Tex., will erect large oil storage tanks here.

+Storage Tanks.—Port Arthur, Tex.—The HOUSTON CONSTRUCTION CO., of Houston, has been awarded a contract for erecting 13 oil storage tanks and seven refining stills at the plant of the Texas Co., here.

Storage Tanks.—Galveston, Tex.—The Magnolia Petroleum Co., which has its headquarters here, will erect two 35,000-lb. steel storage tanks, one to be located on Mustang Island, near Port Aransas, the other near Brownsville. This company also is establishing oil tank farms at Gladys and Delphine, Tex.

***Mechanical Equipment.**—Bellingham, Wash.—Bids will be received by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., until 3 p. m., Oct. 23, for the mechanical equipment (except elevator) of the U. S. post-office at Bellingham, Wash., in accordance with drawings and specification, copies of which may be obtained at the office of the Superintendent of Construction at Bellingham, Wash., or at Washington, at the discretion of the Supervising Architect.

Iron Fence.—Portland, Ore.—See item under Water Supply—Irrigation.

Wharf, Etc.—Sacramento, Cal.—Bids for the construction of a wharf and teaming platform on the left bank of the Sacramento River, between O and P Sts., will be received by the City Clerk until 8 p. m., Oct. 16. M. J. Desmond is Clk.

Harbor Improvement.—San Diego, Cal.—The plan for harbor improvement has been adopted by the city, including concrete pier with a warehouse at the foot of D St. with old mission entrance; pier to extend 800 ft. beyond the bulkhead line; three railroad tracks of standard width on pier to connect with proposed belt line; seawall along bulkhead line at south line of D St., extending north along bulkhead line 2,500 ft. to Cedar St.; dredging of bay where necessary for channel at sides and end of pier and along wall. The improvements will cost $1,000,000.

Docks.—San Francisco, Cal.—Howard C. Holmes, Consult. Engr., 112 Market St., San Francisco, has prepared plans for and the contract will probably be awarded to Thompson Bridge Co., 103 Main St., at $60,000, for the construction of new docks, approaches, spur tracks, etc., at the Risdon Iron Works, of the U. S. Steel Products Corporation, at the foot of 20th St. The plans call for two docks close together, one 384 ft. long and 90 ft. wide, and the other 300 ft. long by 48 ft. Creosoted piles will be used.

%***Dredges.**—San Francisco, Cal.—Bids will be received until noon, Dec. 27, by Major S. A. Cheney, Corps Engineers, U. S. A., Custom House, San Francisco, for constructing two steel hulls, 20-in. pump dredges, "Sacramento" and "San Joaquin."

Wharf.—Besserers Grove, Ont.—Bids will be received until Oct. 18, by R. C. Desrochers, Secy., Pub. Wks. Dept., Ottawa, Ont., for the construction of a pier wharf here. Plans, specifications, and form of contract can be seen and forms of proposals obtained at the offices of J. L. Michaud, Dist. Engr., Montreal, Que., the Postmaster, Orleans, Ont., or at Ottawa.

+Dam.—Buckingham, Ont.—The James MacLaren Co., of Buckingham, has awarded a contract to HANLEY, QUINLAN & ROBERTSON, of Montreal, Que., to build a dam across the Lievre River above High Falls, 24 miles from Buckingham. J. B. McRae is Engr., in Charge, Buckingham. Estimated cost, $200,000.

***Subway and Stations.**—Toronto, Ont.—Bids will be received by G. R. Geary, Mayor and Ch. B. of Control, until noon, Nov. 1, for the construction of three miles of reinforced concrete subway and subway stations. No bid will be received for less than one-half mile section. Plans and specifications are on file at the office of Engineering News, New York. For details see advertisement in this issue. Noted on Aug. 31.

+Wharves.—Vancouver, B. C.—The Great Northern Ry. Co., has let a contract to CHASE & CO. of Vancouver for constructing two wharves 700 ft. in length.

U. S. POSSESSIONS AND CUBA.

Lumber.—Panama.—Bids will be received until 2:30 P. M., Oct. 16, by Major F. C. Boggs, Corps Engrs., U. S. A., Gen. Purchasing Officer, Isthmian Canal Comn, Washington, D. C., for furnishing lumber under Circular 650 B.

Steel Rods, Bars, Etc.—Panama.—Bids will be received until Oct. 9 by Major F. C. Boggs, Corps Engrs., U. S. A., Gen Purchasing Officer, Isthmian Canal Comn., Washington, D. C., for mechanical bond, steel rods, reinforcing bars, etc., Circular 639 A.

Hydroelectric Station.—Panama.—The time for receiving bids for the hydroelectric plant under Circular 648, has been extended from Oct. 9 to Oct. 24. Major F. C. Boggs, Corps Engrs., U. S. A., Gen Purchasing Officer, Isthmian Canal Comn., Washington, D. C., will receive bids.

Condensers, Pumps, Etc.—Philippine Islands.—Bids will be received until 10 A. M., Dec. 4, by Major C. H. McKinstry, Corps Engrs., U. S. A., Officer in Charge of Defense Works, Manila, for condensers, pumps, feed-water heater and forced draft fans. Information can be obtained at Manila or on application to Chief of Engineers, U. S. A., Washington, D. C.

***Breakwater.**—Hawaii.—The following bids were opened on Sept. 8 at the U. S. Engineer Office for the construction of breakwater at Hilo Harbor, H. T.: The BREAKWATER CO., Philadelphia, Pa., stone in superstructure, per ton, 2,000 lbs., $2.17; in substructure, $2.51 (awarded contract); Lord-Young Engineering Co., Honolulu, $2.10 and $2.19; Standard American Dredging Co., San Francisco, $2.63 and $2.63; Hoogs & Belser, Honolulu, $2.74 and $2.34.

Copper Bars.—Panama.—Bids were received as follows on Sept. 23 by Maj. F. C. Boggs, Corps Engrs., U. S. A., Gen. Purchasing Officer, Isthmian Canal Comn., Washington D. C.: Item (1) 127,500 ft., 775,600 lbs, copper conductor bars, Section L-15, Drawing 6841; Item (2) 127,500 ft., 771,800 lbs. alternative, Section A; Item (3) 127,500 ft., 1,037,500 lbs., alternative, Section B; Item (4) alternative bid on manufacturers' specifications; Item (5) 11,300 pieces, 16,837 lbs., copper splice bars, Sections L-15 or A; Item (6) 11,300 pieces, 18,193 lbs., Section B.: R. C. Hoffman & Co., Box 1040, Baltimore, Md., Item (1) $184,825; Item (3) $241,737; Item (5) $4,012; Item (6) $4,239; makers, Pennsylvania Steel Co. United States Steel Products Co., 50 Church St., New York, Item (1) $163,496; Item (3) $217,356; Item (5) $4,950; Item (6) $5,349; makers, Carnegie Steel Co. Wheeling Mold & Foundry Co., Wheeling, W. Va., Item (2) $161,306; Item (5) $4,739; Item (6) $5,030; makers, Coe Brass Mfg. Co.

Structural Steel.—Cuba.—Bids were received as follows on Sept. 23, by the Bureau of Yards and Docks, Navy Dept., Washington, D. C., for 389 tons of fabricated structural steel for four buildings at the naval station at Guantanamo, Cuba.: Item (1), delivery c. i. f. Guantanamo; (2) price per lb. to be added or deducted under Item 1 for changes in quantity; (3) delivery f. o. b. cars Navy Yard, New York; (4) price per lb. for changes under Item 3: United States Steel Products Co., 30 Church St., New York, Item (1) $21,645, (2) 2.59 cts., (3) $21,224, (4) 2.42 cts.; Lehigh Valley Structural Steel Co., Allentown, Pa., Item (1) $24,649, (2) 3 cts., (3) $22,439, (4) 2.75 cts.; Massillon Bridge & Structural Co., Massillon, Ohio, Item (1) $25,495, (2) 3.5 cts., (3) $25,225, (4) 2.78 cts.; Independent Bridge Co., Pittsburgh, Item (1) $23,684, (2) 2.6079 cts., (3) $21,868, (4) 2.0479 cts.; Baltimore Bridge Co., Baltimore, Md., Item (1) $22,758, (2) 2.73 cts., (3) $21,120, (4) 2.53 cts.; McClintick-Marshall Construction Co., Philadelphia, Pa., Item (1) $22,600, (2) 2.75 cts., (3) $20,700, (4) 2.50 cts.

CONTRACT PRICES.

Catskill Aqueduct.—New York, N. Y.—Bids for Contract 100 of the Catskill Aqueduct, which consists of constructing the extension of the Croton blowoff, were received on Sept. 26, by the Board of Water Supply, as follows: (A) Stobaugh Contracting Co., 1 Madison Ave., New York, N. Y.; (B) Henry E. Fox, New York, N. Y.; (C) the Gillespie Co.; (D) Urban Concrete Co.; (E) Holbrook, Cabot & Rollins Corp.; (F) C. W. Blakeslee & Sons, New Haven, Conn.; (G) Bradley Contracting Co.; (H) Moses G. Byers; (I) Phoenix Construction Co.:

CONTRACT 100, CATSKILL AQUEDUCT, NEW YORK, N. Y.

		A	B	C	D	E	F	G	H	I
	Cofferdam (lump sum)	$5:700	$20,000	$9,500	$19,243	$20,000	$21,500	$38,000	$28,000	$50,000
2,300	cu. yds. excavation	1.80	2.50	1.50	.90	2.50	3.25	6.00	8.00	14.00
1,300	cu. yds. concrete masonry	8.80	9.00	15.50	6.36	12.00	11.60	15.00	20.00	20.00
2,000	bbls. cement	1.725	2.00	1.80	1.80	1.95	2.30	1.75	3.00	2.50
50,000	lbs. steel for reinforcing concrete	.05	.02	.04	.05	.07	.06	.06	.10	.10
7,000	tons rock fill under water	1.40	2.00	2.75	4.00	3.75	3.50	5.00	6.00	7.00
300	cu. yds. dry paving and rubble masonry	3.60	4.00	4.25	4.99	6.25	7.00	10.00	12.00	10.00
75	cu. yds. paving & rubble masonryin mortar.	4.50	5.00	4.75	5.10	6.50	8.00	10.00	20.00	15.00
40	M ft. timber and lumber	20.00	10.00	60.00	50.00	75.00	70.00	75.00	75.00	100.00
125	lin. ft. 24-in. vitrified pipe	3.00	4.00	2.50	1.25	3.00	3.50	3.00	2.00	4.00
300	lin. ft. 12-in. and smaller vitrified pipe	2.00	1.50	1.00	.75	2.50	2.00	2.00	2.00	3.00
450	cu. yds. crushed stone and gravel	3.00	2.50	2.25	2.50	3.50	4.00	4.00	4.00	4.50
	Totals, approximate	$41,600	$60,500	$63,700	$69,000	$83,000	$84,500	$122,300	$136,000	$170,000

Catskill Aqueduct.—New York, N. Y.—Bids for Contract 103 of the Catskill Aqueduct, which includes the laying of 20,870 ft. of 48-in. c.-i. pipe and the maintenance for one year, were received on Sept. 26 by the Board of Water Supply, as follows: (A) Beaver Engineering & Contracting Co., New York, N. Y.; (B) Newman & Carey Co., 215 Montague St., Brooklyn; (C) Joseph Burns, 147 East 125th St., New York, N. Y.; (D) Leo E. Kelly, 189 Montague St., Brooklyn; (E) Cranford Co., 52 Ninth St., Brooklyn; (F) John C. Rodgers, Baychester, N. Y.; (G) Degnon Construction Co., 60 Wall St., New York, N. Y.; (H) United Engineering & Constr. Co.. 17 West 42d St., New York.; (I) Murphy Bros., 25th Ave., Brooklyn; (J) Borough Development Co., 186 Remsen St., Brooklyn; (K) Rodgers & Haggerty, Inc., 41 Park Row, New York, N. Y.; (L) Keystone State Construction Co., Philadelphia, Pa.; (M) William Kelly, Brooklyn, N. Y.; (O) King-Ganey Contracting Co., New York; (P) J. F. Cogan & Co., New York; (R) Phoenix Construction Co., 41 Park Row, New York:

CONTRACT 103, CATSKILL AQUEDUCT, NEW YORK, N. Y.

	A	B	C	D	E	F	G	H	I	J	K	L	M	O	P	R
50,000 cu. yds. earth excavation and refilling	$1.20	$1.64	$1.30	$0.85	$1.00	$1.45	$1.49	$1.80	$1.70	$1.25	$2.40	$1.30	$2.99	$1.10	$2.25	$2.55
750 cu. yds. rock excavation	3.00	1.20	2.00	2.00	3.50	2.00	3.00	4.00	2.00	3.00	4.00	1.90	3.00	7.00	5.00	4.50
8,900 tons c.-i. pipe, straight hub and spigot	26.30	25.00	27.00	28.50	28.40	28.00	28.75	27.00	29.00	31.50	26.00	26.00	28.34	38.00	33.50	34.63
300 tons c.-i. huband spigot castings	56.00	64.10	60.00	75.00	90.00	57.00	75.00	80.00	85.00	73.00	75.00	72.00	56.00	100.00	90.00	88.32
10 tons c.-i. flanged pipe and specials	50.00	74.10	60.00	70.00	75.00	68.00	100.00	100.00	85.00	80.00	75.00	70.00	56.00	100.00	90.00	94.00
30 tons. c.-i. valve boxes, manhole heads and covers	49.50	58.60	50.00	60.00	55.00	65.00	60.00	65.00	55.00	55.00.	70.00	60.00	56.00	100.00	90.00	72.84
300,000 lbs. metal work (cared for and set)	.02	.013	.03	.035	.015	.015	.02	.02	.0175	.05	.04	.025	.004	.04	.04	.03
23,000 lbs. structural and reinforcing steel	.05	.04	.03	.04	.035	.05	.03	.05	.07	.07	.04	.04	.04	.05	.05	.04
4,500 lbs. miscelllaneous cast-iron, wrought-iron and steel	.05	.04	.03	.05	.05	.05	.03	.05	.08	.07	.05	.05	.02	.05	.05	.05
1,200 bbls. Portland cement	1.50	2.00	1.70	1.75	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.60	1.50	1.75
650 cu. yds. concrete masonry in pavement foundation	6.60	3.50	4.00	5.00	4.25	4.00	4.00	4.00	4.50	5.50	3.50	4.00	4.00	4.50	4.00	2.40
50 cu. yds. concrete masonry as cradles for sewers & drains	10.00	3.50	5.00	7.00	7.50	5.00	6.00	6.00	5.00	7.50	10.00	10.00	4.00	6.00	10.00	4.00
300 cu. yds. brick or concrete masonry in chambers & sewers	12.00	6.50	8.00	12.00	10.00	10.00	12.00	12.00	10.00	10.00	10.00	10.00	8.00	12.00	12.00	6.00
500 lbs. lead pipe	.20	.12	.12	.15	.25	.10	.15	.25	.20	.35	.12	.30	.07	.15	.15	.15
10 cu. yds. crushed stone and gravel	2.50	3.00	1.25	4.00	3.00	2.00	3.00	4.00	2.00	2.50	2.00	10.00	2.00	3.00	5.00	1.00
300 lin. ft. 3 to 8-in. vitrified or cement pipe	.50	.75	.40	.50	.25	1.00	.25	.25	1.50	.35	.25	.25	.25	1.00	.30	1.25
100 lin. ft. 9 to 15-in. vitrified or cement pipe	1.00	1.25	1.00	2.00	.70	2.00	.60	.60	1.50	1.00	1.00	.50	1.00	1.00	1.00	2.00
500 sq. yds. asphalt block pavement	2.00	2.50	1.40	2.00	1.25	1.70	3.00	2.00	1.75	2.00	1.75	2.00	3.00	3.00	2.50	2.75
50 sq. yds. Belgian block pavement	.30	.40	.20	.30	.50	.60	1.25	.50	.30	.45	.50	.50	.50	2.50	1.50	1.00
900 sg. yds. cobblestone pavement	.10	.25	.10	.30	.40	.60	1.25	.50	.35	.40	.50	.40	.30	2.00	1.50	.40
5,700 sq. yds. granite block pavement	.90	.50	.40	.65	.75	.50	1.25	.75	.30	1.00	1.00	.60	.60	2.00	1.50	.40
100 sq. yds. macadam pavement	.30	.50	.30	.30	.75	.50	1.25	1.00	.50	1.00	.50	.50	.60	1.00	1.50	1.00
3,900 sq. yds. sheet asphalt pavement	1.00	1.25	1.00	2.00	1.25	1.70	1.25	1.50	1.25	1.50	1.60	2.00	2.40	1.50	2.50	2.25
80 sq. yds. wood block pavement	3.60	2.00	2.00	3.50	2.50	2.00	3.00	5.00	2.00	4.00	5.00	2.00	2.00	3.00	2.50	3.00
300 sq. yds. flag sidewalks and crosswalks	.10	.60	.30	.90	.75	.30	.25	1.00	.20	2.25	.10	1.00	1.20	1.00	1.00	1.00
250 sq. yds. curb	.10	1.00	.03	.30	.40	.25	1.00	.60	.30	.40	.10	.20	.50	.50	.25	.20
2,000 sq. ft. cement concrete sidewalks	.20	.15	.15	.15	.12	.18	.25	.20	.20	.16	.20	.15	.18	.15	1.50	.20
Totals, approximate	$344,000	$349,000	$352,000	$357,000	$360,000	$369,000	$384,000	$389,000	$397,000	$410,000	$415,000	$441,000	$448,000	$477,000	$492,000	$499,000

***Sewers.**—Reading, Pa.—Bids were received Sept. 20 by the City Clerk for constructing the Franklin St. and Rose Valley Sewers, as follows: (A) D. M. Rosser, Kingston, Pa.; (B) Whiting Turner Construction Co., Baltimore, Md.; (C) Fehr & O'Rourke, Reading, Pa.; (D) Reading Contracting Co., and H. E. Ahrens, Reading, Pa.; (E) Monroe Paving Co., Philadelphia, Pa. The item bids were:

FRANKLIN ST. SEWER, READING, PA.

	A.	B.	C.	D.
270 lin. ft. 6 ft. cir., concrete sewer	$16.50	$18.50	$13.[illegible]	$19.50
53 lin. ft. 8 ft. silt basin, concrete	19.00	27.20	17.[illegible]	21.33
50 lin. ft. 7 ft. 1 in × 3 ft. 2 in. concrete sewer, light section	23.00	19.75	19.[illegible]	20.17
60 lin. ft. 7 ft. 4 in. × 3 ft. 2 in. concrete sewer, heavy section	33.00	30.80	34.[illegible]	27.85
22 lin. ft. 7 ft. 4 in. × 3 ft. 2 in. junction chamber	33.00	19.00	26.[illegible]	25.00
396 lin. ft. 5 ft. concrete sewer	9.50	11.00	8.[illegible]	10.50
15 lin. ft. junction chamber, 5-ft. concrete	7.00	12.20	10.2[illegible]	10.50
1,669 lin. ft. 3 ft. 6 in. concrete sewer	8.50	9.15	8.3[illegible]	8.38
582 lin. ft. 3 ft. concrete sewer	7.50	8.12	6.3[illegible]	6.96
520 lin. ft. 20-in. vitrified pipe sewer	2.50	2.42	3.0[illegible]	2.10
110 lin. ft. 15-in. pipe sewer	2.00	1.33	2.00	1.50
20 cu. yds. dry rubble in place	4.00	5.00	3.50	4.00
15 cu. yds. rubble masonry	4.50	8.00	5.00	8.00
1,170 lin. ft. 10-in vitrified house sewer	1.50	1.41	1.63	.93
225 lin. ft. 5-in. vitrified house sewer laterals	.50	1.00	1.33	.50
100 cu. yds. earth excavation for laterals	1.00	3.00	1.25	1.50
56 ver. ft. house sewer manholes	7.00	6.60	4.50	5.50
100 ver. ft. storm sewer manholes	5.00	5.36	4.50	4.75
9 basins, Plate "C"	95.00	179.00	90.00	130.00
17 basins, Plate "I"	90.00	196.00	90.00	150.00
1 basin, Plate "D"	95.00	81,00	50.00	40.00
50 M lumber in place, per M	20.00	30.00	35.00	25.00
Concrete in place, per cu. yd	6.00	11.00	9.50	9.00
Earth excavation and back fill, per cu yd.	1.00	3.00	1.35	1.50
Rock excavation and back fill, per cu yd.	2.50	7.00	3.50	2.50
Totals	$41,890	$48,071	$40,413	$42,884

ROSE VALLEY SEWER, READING, PA.

	A	B.	C.	D.	E.
1,503 lin. ft. 8 ft. 6 in. concrete sewer	$30.00	$23.70	$18.30	$19.60	$19.46
56 lin. ft. junction chamber, 8 ft. 6 in. sewer (concrete)	50.00	23.40	25.84	23.00	28.02
260 lin. ft. 24-in. pipe sewer	3.00	2.60	3.05	2.50	3.48
400 lin. ft. 20-in. pipe sewer	2.50	2.55	2.75	2.15	3.09
130 lin. ft. 18-in. pipe sewer	2.00	2.50	2.70	2.15	2.92
25 lin. ft. 15-in. pipe sewer	1.50	2.30	1.92	1.75	2.31
70 lin. ft. 10-in. pipe sewer	1.50	.75	2.12	.50	1.95
375 lin. ft. 10-in. house sewer	2.00	1.00	1.23	.60	1.95
20 ver. ft. house sewer manholes	5.00	6.66	4.50	5.50	8.38
75 ver. ft. storm sewer manholes	5.00	4.35	4.50	4.75	8.38
2 Plate "C" basins	95.00	184.00	90.00	135.00	110.00
4 Plate "I" basins	90.00	196.00	90.00	160.00	100.00
60 M ft. lumber in place, per M ft.	20.00	30.00	35.00	25.00	40.00
Concrete in place, per cu. yd	6.00	11.00	9.50	9.00	9.00
Earth excavation and back fill, per cu. yd.	1.00	3.00	1.25	1.50	.85
Rock excavation and back fill, per cu. yd.	2.50	7.00	3.50	2.50	2.50
Totals	$55,709	$45,229	$36,839	$37,547	$40,206

Readers' Wants

If you are in the market for material, equipment or supplies, and fail to find it in our advertising pages, send us full particulars, and we will gladly put you in touch with the right parties.

Engineering Equipment.—Lapore India.—We are in receipt of a latter from the Engineer in Chief North Western Railway, asking for Catalogs of engineering equipment of all sorts.

The Carson-Payson Co., Indianapolis, Ind, is in the market for a small concrete mixer. The company would also like to receive catalogs showing general equipment which might be used in a general engineering contracting business.

The Underground Construction Co., of St. Louis, but with a field office at Siebold Hotel, Fort Worth, Tex., is in the market for machinery, tools, etc., for use on the Fort Worth dam, which contract has recently been awarded this company.

EXAMINATIONS.

Officers in Engineer Corps U. S. Army.—Washington, D. C.—We are officially informed that the examination for officers in the Engineer Corps of the United States Army, open to civilians under 29 years of age, will not be held for at least three months. The orders prescribing the examination requirements are expected in the near future.

Inspector of Sewer Construction.—New York, N. Y.—An examination will be held by the Municipal Civil Service Commission, 299 Broadway, New York, applications for which will be received until 4 p. m., Sept. 29, for the position of Inspector of Sewer Construction. The date of the examination will be announced later. The subjects and weights are as follows: Technical, 5; experience, 2; mathematics, 1; report, 2. The percentage required is 75% on the technical paper and 70% on all. Salary, $4 per day. Minimum age, 21 years; maximupm age, 50 years. F. A. Spencer is Secy.

Inspector of Regulating, Grading and Paving.—New York, N. Y.—Applications will be received by the Municipal Civil Service Commission, [illegible] Broadway, New York, until Oct. [illegible], for the position of Inspector of Regulating, Grading and Paving. The [illegible] of examination will be announced later. The subjects and weights of the examination are as follows: technical, 5; experience, 2; mathematics, [illegible] report, 2. On thme technical paper, [illegible] will be required and 70% on all. Vacancies: None at present; salary, [illegible] day, or $1,200 a year; minimum age, 21 years; maximum age, 50 years. Frank A. Spencer is Secy.

Laboratory Assistant.—Washington, D. C.—The U. S. Civil Service Commission announces an examination on Oct. 25, to secure eligibles from which to make certification to fill vacancies as they may occur in the position of Laboratory Assistant qualified in advanced physics in the Bureau of Standards, Department of Commerce and Labor, at salaries ranging from $900 to $1,200 a year. The examination will consist of the subjects mentioned below, weighted as indicated: Advance general physics, 50 points; education, experience and fitness, 50 points. Applicants must have reached their twentieth year, but not their thirty-fifth birthday. Examination form 1312.

Laboratory Assistant.—Washington, D. C.—The U. S. Civil Service Commission announces an examination on Oct. 25, to secure eligibles from which to make certification to fill vacancies as they may occur in the position of Laboratory Assistant qualified in engineering, at salaries ranging from $900 to $1,200 a year, in the Bureau of Standards. The examination will consist of the subjects mentioned below, weighted as indicated: General physics, 25 points; experimental engineering and theory of materials, 25 points; education, experience and fitness, 50 points. Applicants must have reached their twentieth year, but not their thirty-fifth birthday. Examination form 1312.

Laboratory Assistant in Chemistry.—Washington, D. C.—The U. S. Civil Service Commission announces an examination on Oct. 25-26, to secure eligibles from which to make certification to fill such vacancies as may arise during the ensuing year in the position of Laboratory Assistant in Chemistry in the Bureau of Standards, Department of Commerce and Labor, at salaries varying from $900 to $1,200 a year. The examination will consist of the subjects mentioned below, weighted as indicated: General physics, 25 points; general chemistry, 50 points; education, experience and fitness, 25 points. Applicants must have reached their twentieth, but not their thirty-fifth birthday. Examination form 1312.

Inspector of Masonry Construction.—New York, N. Y.—The Municipal Civil Service, Commission, 299 Broadway, New York, will receive applications until Oct. 6, for the position of Inspector of Masonry Construction, Board of Water Supply. The dates will be announced later. The subjects and weights of the examination are as follows: Technical, 5; experience, 2;

mathemati 1; report, 2. The percentage re ired is 75 on the technical paper and on all. Salary: For open trench wo $4.50 a day when employed, an $5 a day for tunnel work. Minimum , twenty-one years; maximum ag ifty years. Frank A. Spencer is cy.

Assistan Chemist.—Washington, D. C.—The S. Civil Service Commission announce n examination on Oct. 25 to secure gibles from which to make certificati to fill vacancies as they may occu n the position of Assistant Chemist the Bureau of Chemistry, Departme of Agriculture, at salaries ranging m $1,200 to $1,600 a year, and vaca es requiring similar qualifications they may occur in other branches the service, unless it shall be decid in the interest of the service to such vacancy by reinstatement, tr sfer or promotion. The examinatio will consist of the subjects mentione below, weighted as indicated: actical questions on theoretical a applied chemistry, consisting of (1 general chemistry, including organic d physical chemistry, and (2) ana ical chemistry, 50 points; translati from French or German, 10 point education, training, experience and tness, 40 points. Applicants must ha reached their 20th birthday. Examinat n form 1312.

Junior Chemist.—Washington, D. C.—The S. Civil Service Commission announce an examination on Oct. 25-26, to se ure eligibles from which to make c tifications to fill a vacancy in the p ition of Junior Chemist qualified in xplosives, in the Bureau of Mines at Pittsburgh, Pa., at a salary of from $1,020 to $1,200 a year, and vacancies requiring similar qualifications as they may occur, unless it shall be decided in the interest of the service to fill the vacancy by reinstatement, transfer or promotion. The salaries in the position of Junior Chemist qualified in explosives, Bureau of Mines, range from $1,020 to $1,500 a year. The examination will consist of the subjects mentioned below, weighted as indicated: Mineralogy, 5 points; translation from French or German technical works, 10 points; general chemistry and physics, including calculations, 20 points; essay on a subject relating to explosives, 15 points; chemistry of explosives, 25 points; training experience and fitness, 25 points. Applicants must not have reached their 40th birthday. Examination form 1312.

INDUSTRIAL NOTES.

The firm of N. A. Middleton & Co., Engineers and General Contractors, has been organized in Baltimore, Md., with offices at 515 Continental Bldg.

An air washing and humidifying machine has been installed in the Colony Club of New York by the Carrier Air Conditioning Co., Buffalo, N. Y.

Mr. J. S. Cothran, Charlotte, N. C., has been appointed sales agent for the Terry Steam Turbine Co., Hartford, Conn., for North and South Carolina.

The Buffalo Forfle Co., Buffalo, has been awarded the contract for the heating and ventilating system for the shop at Wilmerding, Pa., by the Westinghouse Air Brake Co.

The Ruggles-Coles Engineering Co., New York, has received the order from Pusey & Jones Co., Wilmington, Del., for two 66-in. propellers of "monel" metal for a yacht which they are building.

Mr. Harold V. Coes, formerly of the Liquid Carbonic Co., has been appointed manager of Lockwood, Greene & Co.'s, architects and engineers for industrial plants, new office in the First National Bank Bldg., Chicago.

The Fisher Hydraulic Stone & Machine Co. has moved its offices from Mt. Gilead, Ohio, to 1109 Kilburn Ave., Rockford, Ill. The machine made by this company rams wet concrete into a compact mass by hydraulic pressure.

H. C. Darnell & Co., Kansas City, sales representatives for the Wood Drill Works, Paterson, N. J., have supplied a number of Improved "Wood Rock Drills" to Callahan Bros. and R. W. Waddell for the new Kansas City, Mo., sewer.

Mr. Claude E. Cox has joined the firm of Arthur D. Little, Inc., Boston, Mass., as Resident Manager of the Engineering Laboratories, which the organization is conducting for the General Motors Co., Detroit, Mich. Mr. Cox recently resigned as factory manager of the H. E. Motor Car Co., Minneapolis, Minn.

The Vulcan Supply Co., Inc., has established offices at 1 Madison Ave., New York, N. Y. The company has formed connections with a number of mills and manufacturers and is in a position to offer complete equipments for contractors at attractive prices. Mr. A. G. Sivori, is President of the company, for many years he was New York representative for The Orenstein, Arthur Koppel Co. Mr. E. P. McDonald is Vice-President.

The Pulsometer Pump in Sinking Caissons.—In putting down the caisson foundations for a department store in Newark, N. J., which is being built by the George A. Fuller Co., 17 Pulsometer pumps were used to raise the water from the individual caissons. A sump was made, into which all the Pulsometers discharged. From this sump the water was taken by a centrifugal pump driven by an electric motor and raised to a discharge pipe leading into a sewer.

The Laboratories of Arthur D. Little, Inc., engineers and chemists, now located at 93 Broad St., Boston, have been moved to the recently acquired plot at Brookline Ave. and Bellevue St., near the Fenway, Boston. The plans provide for a building containing a paper-making plant with all the machinery necessary for conducting experiments in the practical manufacture of paper from various products and also a combined cylinder and fourdrinier machine which is to be installed by the Pussey & Jones Co., Wilmington, Del. It will be the only plant in the world available for the testing of the value of paper-making materials, on a commercial basis.

Exporting American Machinery.—Recent developments in the New York machinery trade indicate that the Allied Machinery Co., of America has passed the experimental stage and is now reckoned as an active promoter of export machinery trade between the United States and European countries. Inquiries for various kinds of machinery for shipment abroad have been received by local dealers from the company during the past two months. In some instances office files had to be consulted for the purpose of identifying the inquiries. Many, however, found that they had no record of the original announcement of incorporation, and organization of the selling company which affords an excuse for restating those facts in connection with the more recent news concerning it. Articles of incorporation were filed under the laws of New York State late last Spring. Captain Godfrey L Carden, formerly of the U. S. Revenue Service, promoted the enterprise, the chief purpose of which is to market and finance the sales of American machinery in foreign countries. Associated with Captain Carden on the board of directors are several prominent members of the National City Bank coterie, and the company is officered as follows: President, Samuel McRoberts; vice-president and general manager, Godfrey L. Carden; treasurer, Thomas A. Reynolds, and secretary H. C. Newlands. The main offices are in the National City Bank Building, corner of Wall and William Sts. The inception of the company originated during Captain Carden's investigation of the machine tools trade throughout Europe under a commission created by an act of Congress in 1908. Three prominent factions were disclosed by that investigation: One favorable to the American builder of machines while the other two seriously operated against him. The question of merit constitutes the former, and on that point there was a general appreciation of the excellence of the American product. The latter consists of national prejudice, and financing facilities that favored the foreign seller. After making his report to the Department of Commerce and Labor, Captain Carden set about interesting banking interests in a plan to supply the financial assistance which might be used by the foreign manufacturers who showed a preference for American machine equipment, and the Allied Machinery Co., of America is the result of his efforts. President McRoberts, in charge of the banking arrangements, and general manager Carden prepared to offer time accommodations that will compete with the foreign sellers of machinery, sailed for Europe in May and the selling campaign was inaugurated shortly after. About 60 manufacturing firms in this country are directly interested in the success of the undertaking.

TRADE PUBLICATIONS.

(The standard sizes for pamphlets and trade catalogs recommended by all the principal engineering societies of the United States are: 3½ x 6 ins., 6 x 9 ins. and 9 x 12 ins.)

CONVEYING MACHINERY.—The Exeter Machine Works, Pittston, Pa. Paper; 7 × 10 ins.; pp. 42; illustrated.

Coal-handling and conveying machinery is illustrated in this bulletin, which contains very little descriptive text.

VALVE GEARS.—Baldwin Locomotive Works, Philadelphia, Pa. Stiff paper; 9 × 6 ins.; pp. 32; illustrated.

This pamphlet gives a good description of the Walschaerts valve gear, explaining its operation and giving directions for its adjustment and repair in case of breakdown.

GRINDING WHEELS.—Norton Co., Worcester, Mass. Stiff paper; 5 × 8 ins.; pp. 26; illustrated.

This booklet gives instructions for the correct mounting of grinding wheels and describes several different kinds of protecting hoods and other devices for insuring the safety of the operator.

DUMPING WAGONS.—Troy Wagon Works Co., Troy, Ohio. Paper; 3½ × 7 ins.; pp. 8; illustrated.

Included in this folder describing the Troy dumping wagon is a little booklet giving the methods and results of the rather unique tests made by Prof. W. K. Hatt, of Purdue University, to ascertain the strength of a dumping wagon. These tests, which were described in Engineering News of Sept. 19, 1907, are here briefly covered in a short report written by Prof. Hatt.

BEARINGS.—J. A. Nelson, Publisher, 11 John St., New York City. Paper; 3½ × 6 ins.; pp. 12; 10 cts.

This purports to be an impartial treatise on the relative merits of ball and roller bearings for various uses. The author, whose name is not given, shows a strong preference for flexible roller bearings for most of the uses considered.

TRENCH EXCAVATORS.—The G. W. Parsons Co., Newton, Ia. Paper; 10½ × 8½ ins.; pp. 32; illustrated.

A description of the Parsons trench excavator, which is of the bucket-chain type, and some data of its operation are given in this booklet which contains a number of illustrations showing the construction and operation of the machines.

ROCK CRUSHING PLANTS.—Allis-Chalmers Co., Milwaukee, Wis. Paper; 7¾ × 10½ ins.; pp. 44; illustrated.

A few pages of descriptive and explanatory matter are followed by full-page line cuts showing sectional elevations of a variety of rock crushing plants, which occupy the greater part of the bulletin.

CONCRETE MACHINERY.—W. Van R. Whitall, Inc., 508 Hudson Terminal Bldg., New York City. Paper; 3¼ × 5¼ ins.; pp. 56; illustrated.

This is a handy little reference booklet of the "Lakewood Line" of contractors' equipment of concrete mixers, buckets and cars, manufactured by the Ohio Ceramic Engineering Co., of Cleveland, Ohio.

ROAD ROLLERS.—Buffalo Steam Roller Co., Buffalo, N. Y. Cloth; 3½ × 6 ins.; pp. 40; illustrated.

Directions for starting and operating steam road rollers is the subject of this booklet. It is written for steam roller engineers, and contains a number of hints as to how to handle any steam engine, and road rollers in particular.

PNEUMATIC TOOLS.—The Chicago Pneumatic Tool Co., Fisher Bldg., Chicago, Ill. Stiff paper; 6 × 9 ins.; pp. 104; illustrated.

A great variety of pneumatic tools for all purposes is illustrated and briefly described in this catalog. The introductory page gives a few paragraphs on the care of pneumatic hammers.

WATERPROOFED PORTLAND CEMENT.—Sandusky Portland Cement Co., Sandusky, Ohio. Paper; 4 × 9 ins.; pp. 14; illustrated.

This relates to the properties of Medusa waterproofed cement, and to tests of concrete made with it. There is also a list of some of the work on which it has been used for waterproofing floors, reservoirs, foundations, tunnel lining, buildings, etc.

SEWER SPECIFICATIONS. — Clay Products Publicity Bureau, Kansas City, Mo. Stiff paper; 7 × 9½ ins.; pp. 112.

These specifications are claimed to be the joint product of six well-known engineers. The book includes a form of "Notice to Bidders," a form of "Agreement and Definition of Parties and Terms," and general specifications for material and workmanship.

STRUCTURAL STEEL.—Carnegie Steel Co., Pittsburgh, Pa. Paper; 5 × 7½ ins.; pp. 54; illustrated.

This is a third edition of a little booklet on steel derricks and drilling rigs for oil, gas, salt and other wells, mineral exploration work, etc. It contains structural details of the different types of well derricks which will be useful to draftsmen and designers engaged in this class of structural work.

FORGING PRESSES.—Mesta Machine Co., Pittsburgh, Pa. Stiff paper; 6 × 9¼ ins.; pp. 23; illustrated.

Quick-acting, steam-hydraulic forging presses are described in this catalog, which is made up largely of full-page half-tones showing presses already installed. It is claimed that this type of press has "almost eliminated the use of the steam hammer in Europe."

INDUSTRIAL AIR COMPRESSORS.—Allis-Chalmers Co., Milwaukee, Wis. Paper; 7¾ × 10½ ins.; pp. 16; illustrated.

Electrically driven portable and stationary air compressors for industrial purposes are described in this bulletin. Some of the uses for which these compressors are intended are automatic operation of doors or gates, the operation of pneumatic tools and railway switches and signals, and for spraying liquids.

HOISTING ENGINES.—Williamson Bros. Co., Philadelphia, Pa. Stiff paper; 9 × 12 ins.; pp. 30; illustrated.

Both steam-engine driven and electric hoists are illustrated and described. One interesting product of this firm which has been built and used with success for a number of years is a portable hoisting outfit, consisting of a boiler, a one-cylinder engine and a one-spool hoist, all mounted on a two-wheel truck.

ELECTROLYTIC SURVEYS AND BOND TESTS ON ELECTRIC RAILWAYS. —Albert B. Herrick, 14 Church St., New York, N. Y. Paper; 8½ × 11 ins.; pp. 15; illustrated.

This relates to a system of testing the rail bonds for efficiency and leakage, and the apparatus used in the work, which includes a car equipped with testing and recording mechanism. A four-page folder gives a long list of railways which have had these investigations made in the interests of economy of operation.

GASOLINE ENGINE LUBRICANTS.—International Acheson Graphite Co., Niagara Falls, N. Y. Paper; 6 × 3½ ins.; pp. 16; illustrated.

Lincoln Beachey's flight over Niagara Falls, in a Curtiss biplane and the winning of two automobile races are described in this pamphlet. In these three events, Acheson graphite lubricants were used. One of these "Oildag" is composed of deflocculated graphite diffused in oil and the other "Gredag" is a combination of pure graphite with a high-grade grease. Price list is given.

WATER-TUBE BOILERS.—The Babcock & Wilcox Co., 85 Liberty St., New York City. Cloth; 7¼ × 10¼ ins.; pp. 52; illustrated.

The history of the invention and a description of the construction of the Rust water-tube boiler occupies the first half of this book and is followed by data of efficiency and capacity tests made on a 335-H.P boiler of this type. Jan. 3, 1907, by William Kent. Numerous excellent illustrations of boiler installations and boilers under construction are included.

STEEL CONVERTERS.—Tropenas Converter Co., 50 Church St., New York City. Stiff paper; 6 × 9 ins.; pp. 52; illustrated.

A definition of steel and a description of the open hearth and Bessemer processes from the introduction to this booklet. The Tropenas converter is described, in which air is blown above the surface instead of beneath to avoid a violent stirring of the metal. These converters are now made with a drop bottom, which is claimed to be a great convenience.

Sand grinders and mixers and ladle heaters for use in foundries are also described.

CONCRETE MIXERS.—National Mixer Co., Rochester, N. Y. Paper; 9 × 6 ins.; pp. 24; illustrated.

The National mixer is one of the continuous mixing type. The mixing is done by a revolving drum, provided with stationary deflectors that carry the aggregates upward and forward in a rolling kneading motion. Dry mixing is done in ¾ of the length of the drum, water being sprayed on the aggregates during the remaining length. The drum is driven by 3½-HP. gasoline engine, and is claimed to have a capacity of from 4½ to 6 cu. yds. per hour.

GALVANIZED-IRON ROOFING.—American Sheet & Tin Plate Co., Pittsburgh, Pa. Stiff paper; 6 × 9 ins.; pp. 42; illustrated.

Engineers and contractors who have to erect temporary and portable camps will find this catalog particularly interesting. It contains considerable information in regard to the size and weights of corrugated and plain iron and steel plates. The method of attaching the plates to roofs and sides of buildings is quite clearly shown, and also the methods of measuring roofs for the amount of material required. A table is given showing the weights of roofing of various materials, which furnishes data worth filing.

CENTRIFUGAL PUMPS.—Goulds Mfg. Co., Senaca Falls, N. Y. Paper; 8 × 10 ins.; pp. 16; illustrated.

This is Bulletin No. 105, issued by this firm, and contains a brief description of its single-stage, single-suction centrifugal pumps. These pumps are made direct-connected to a gasoline engine or electric motor or for belt drive. They are made in sizes, with nominal capacities, from 30 to 4,200 gals. per min., costing from $30 to $500. A number of useful suggestions are added for installing primary and starting centrifugal pumps. Tables are appended giving the loss of head due to friction in smooth, straight wrought-iron pipes per 100 ft. when discharging certain quantities of water, and the loss of head due to friction in various size smooth elbows.

CORE DRILLS. — McKierman - Terry Drill Co., 115 Broadway, New York City. Paper; 6 × 9 ins.; pp. 70; illustrated.

There is a surprising amount of information on core drilling in this little booklet. It is a well selected collection on the great variety of uses which are made of core drills in mining and contracting work. The McKierman-Terry core drill is a shot drill, as is probably [illegible] known to our readers. Cores [illegible] the way from 1¼ ins. to 26 ins. [illegible] diameter have been obtained. Th[illegible] standard equipments vary from Typ[illegible] with a core diameter of 1¼ to 1[illegible] to Type C-3 with a core diameter [illegible] to 16¾ ins. The motive power m[illegible] steam, compressed air, gasoline o[illegible]ectricity.

(Continued on Page [illegible])

LIST OF CONTRACTS PENDING

Plans and Specifications on File.

The following plans (P.) and Specifications (S.) are on file for reference only unless otherwise noted at the office of The Engineering News Publishing Co., 220 Broadway, New York.

Bids close.		Noted in issue of
10- 7	Piers, Washington, D C (S)	9-14
10-12*	Canal, Yuma Ariz. (S)	9-28
10-21	Roof covering, Norfolk, Va. (S.)	9-21
10-21	Waterfront impvts., Boston, Mass. (S.)	9-21
10-28	Impvts. to quarters, Vallejo, Cal (S.)	9-21
11- 1*	Head gates, Boise, Idaho (S)	9-28
11- 1*	Subway and stations, Toronto, Ont. (P. & S.)	10- 5
11-10	and 11 Building, Hawaii. (S.)	9-21
11-10	and 11, Storehouse, Hawaii. (S.)	9-21

Light, Heat and Power Plants.

Bids close.		Noted in issue of
10- 6	Street lighting, Overbrook, N. J.	9-28
10- 9*	**Hydroelectric station and equipment, Wash., D. C.**	9-14
10- 9	**Lighting fixtures, Los Angeles, Cal.**	9-21
10- 9	**Heating and ventilating system, Los Angeles, Cal.**	9-21
10-10	Power plant, Phoenix, Ariz.	9-28
10-11	**Power house, Colonial Beach, Va.**	8-31
10-11*	**Lighting fixtures, etc., Omaha, Neb.**	9-21
10-12*	**Power house and equipment, Wheeling, W. Va.**	9-21
10-12	**Lighting fixtures, Butte, Mont.**	9-14
10-14	Lighting fixtures, Washington, D. C.	9-28
10-15	Lighting fixtures, Washington, D. C.	9-28
10-15*	Electric railway, New York, N. Y.	9-28
10-16	Elec. light plant, Baroga, Mich.	10- 5
10-16	Elec. light plant, Baraga, Mass.	9-28
10-18	Gas lamps, Boston, Mass.	9-28
10-18	**Street lighting, Charleston, S. C.**	9-14
10-18	Overhead and line material, Toronto, Ont.	10- 5
10-21	Lighting fixtures, Washington, D. C.	10- 5
10-23	**Electrical equipment, Los Angeles, Cal.**	9-21
10-24	**Inverted lamps and posts, Boston, Mass.**	9-21
10-25*	Engine and generator, etc., London, Ky.	10- 5
10-25	Wire, Fort Leavenworth, Kan.	10- 5
11- 1	Railway cars, San Francisco, Cal.	10- 5
11-24*	Equipment for power station, Lethbridge, Alta.	10- 5

Bridges.

10- 5	Bridge, Wenatchee, Wash.	10- 5
10- 5	Bridges, Jersey City, N. J.	10- 5
10- 6	Bridge, Vermilion, Minn.	9-28
10- 6	Bridge, Lakemills, Wis.	9-28
10- 6	Bridge, Oroville, Cal.	9-28
10- 7	Bridge repair, Clearfield, Pa.	9-28
10- 7	**Bridge work, Cleveland, O.**	9-14
10- 7	Bridges, Washington, Ind.	10- 5
10- 7	Bridge, Ventura, Cal.	10- 5
10- 7	Bridges, Marysville, Cal.	10- 5
10- 7	Bridges, Waterloo, Ill.	10- 5
10- 7	Bridge work, Indianapolis, Ind.	10- 5
10- 9	Bridge, Ashdown, Ark.	9-28
10- 9	Bridges, Sussex, Va.	9-28
10- 9	Bridges, Merced, Cal.	10- 5
10- 9	Bridges, Richmond, Va.	10- 5
10-10	Bridge, Houston, Texas	10- 5
10-10	Bridge, Bellaire, Ohio	10- 5
10-10	**Bridge, Theodore, Utah**	9-21
10-11	Bridge work, Lebanon, Ind.	10- 5
10-11	Bridge work, Atlantic City, N. J.	10- 5
10-13	Bridges, Cincinnati, Ohio	9-28
10-16	Bridges, Bartlesville, Okla.	10- 5
10-16	Culvert, Los Angeles, Cal.	10- 5
10-16	Bridges, Redwood City, Cal.	10- 5
10-16	Bridge, San Diego, Cal.	10- 5
10-16	Bridges, San Jose, Cal.	10- 5
10-17	Bridge, Lancaster, Pa.	9-28
10-17	Bridge work, Rushville, Ind.	10- 5
10-18*	Bridge, Hartford, Conn.	10- 5
10-21	Bridge, Vicksburg, Miss.	10- 5
10-24	Bridge, Toledo, Ohio	10- 5
10-28	Bridge work, Cleveland, Ohio,	10- 5
11- 1	Bridge work, Cleveland, Ohio,	10- 5
11-20	Bridges, Houston, Tex.	10- 5

Buildings.

Bids close.		Noted in issue of
10- 6	**U. S. post office, Pendleton, Ore.**	9- 7
10- 6	Restaurant, Baltimore, Md.	10- 5
10- 6	Building repairs, Philadelphia, Pa.	10- 5
10- 7	**Factory for prison, Rusk, Tex. (Mfg. Pl.)**	9-21
10- 7	School, Kingman, Ind.	9-28
10-7	Buildings, Springfield, Mo.	9-28
10- 9	**U. S. post office, Winchester, Ky.**	8-31
10- 9	Building, Athens, Ont.	10- 5
10- 9	Auditorium, Philadelphia, Pa.,	10- 5
10-10	Chemistry building, Madison, Wis.	10- 5
10-10	Buildings, Athens, Ont.	10- 5
10-10	Engine house repairs, New York, N. Y.	10- 5
10-10	Apartment, Philadelphia, Pa.,	10- 5
10-10	School, Washington C. H., Ohio	10- 5
10-10	**U. S. post-office, Washington, D. C.**	8-31
10-10	Auditorium, Ann Arbor, Mich.	9-28
10-10	Hospital, Redfield, S. Dak.	9-28
10-11	Buildings, Columbus, Ohio	9-28
10-11	Armory, Sarnia, Ont.	9-28
10-11	Laboratory bldgs., Columbus, Ohio	9-28
10-11*	Cells, etc., for jail, Omaha, Neb.	9-21
10-11	U. S. post-office, Newberry, S. C.	9-21
10-11	Sheep exhibit bldg. Columbus, Ohio	9-21
10-11	Building, Quebec, Que.	10- 5
10-13	Court house repairs, New York, N. Y.	10- 5
10-13	Laundry machinery, New York, N. Y. (Mfg. Pl.)	10- 5
10-15	**Hospital, Salem, Ohio**	9-28
10-16	School, Cleveland, Ohio	10- 5
10-16	School addition, New York,	
10-17	High school, Wapello, Iowa	10- 5
10-17	Building, Quebec, Que.	10- 5
10-18	School, Whippany, N. J.	9-28
10-18	Court house, Benton, Mo.	9-28
10-19	Building, Kent, Ohio	10- 5
10-24	U. S. post office, Lexington, Va.	9-28
10-31*	**U. S. post-office, Florence, Ala.**	9-21
10-31*	**U. S. post-office, Minneapolis, Minn.**	9-14
10-31	School buildings, Pasadena, Cal.	10- 5
11- 1	Building, Raleigh, N. C.	10- 5
11- 1	Plans and specifications, library, Muskogee, Okla.	9-28

Water-Works.

10- 6	**Water-works, Oxford, Ohio.**	9-28
10- 6	**Pumping station equipment, Winchester, Ill.**	9-28
10- 6	**Force-main, Monterey, Cal.**	9-21
10- 6	Fire main, Philadelphia, Pa.	10- 5
10- 6	Pipe etc., Cincinnati, Ohio	10- 5
10- 6	Pipe line, Liberty, Mo.	10- 5
10- 9	Water connections, Dayton, Ohio	10- 5
10- 9	Well, Ware, Ill.	10- 5
10- 9	Intake pipe, North Bay, Ont.	10- 5
10- 9	Reservoir, Chenoa, Ill.	10- 5
10- 9	Well, St. Charles, Ill.	10- 5
10- 9	**Water main ditch, Loup City, Neb.**	9-28
10- 9*	**Filter plant work, Niagara Falls, N. Y.**	9-28
10-10	**Water-works, Shelby, Neb.**	9-28
10-10	Water extensions, Payette, Idaho	10- 5
10-10	Water main, Milwaukee, Wis.	10- 5
10-10	Water pipe, Chicago, Ill.	10- 5
10-11	Water pipe, Long Beach, Cal.	9-28
10-11*	Reservoir, Greencastle, Pa.	9-28
10-11*	**Water-works, Colonial Beach, Va.**	8-24
10-12*	**Canal, Yuma, Ariz.**	9-21
10-12*	**Intake pipe, etc., Windsor, Ont.**	9-21
10-13	Pipe, Columbus, Ohio	10- 5
10-14	Pumping engine, Temple, Tex.	10- 5
10-16	**Dam, Carlsbad, N. Mex.**	9- 7
10-16	Intake, etc., Muskegon, Mich.	9-28
10-16*	**Reclamation work, Sunnyside, Wash.**	9-28
10-16*	**Excavation, pipe, etc., Mabton, Wash.**	9-28
10-16*	Pumping engine, Sheyboygan, Wis.	10- 5
10-16	Water-works plant, Cornell, Ill.	10- 5
10-16	Water-works impvts., Baraga, Mich.	10- 5
10-17	Water system, Decatur, Neb.	10- 5
10-17*	Pipe, valves, etc., Charlotte, N. C.	10- 5
10-18	Water system, Exeter, Cal.	9-28
10-18	Water system, Camp Yosemite, Cal.	9-28
10-18	**Water-works, Lexington, Miss.**	9-28
10-20*	Canal, San Antonio, Tex.	10- 5
10-31	**Flume work, Wisdom, Mont.**	9-28
10-31	**Water-main, Cleveland Hgts., Ohio**	9-28
11- 1*	**Head gates, Boise Falls, Idaho**	9-28

Sewers.

Bids close.		Noted in issue of
10- 5	Sewers, Milwaukee, Wis.	10- 5
10- 5	Sewer, Burlington, Iowa	10- 5
10- 5	Sewers, Parkersburg, W. Va.	10- 5
10- 6	Sewer, Buffalo, N. Y.	10- 5
10- 6	Pipe, Boston, Mass.	10- 5
10- 6*	**Sewers, Dallas, Tex.**	9-21
10- 6	Sewer, St. Louis, Mo.	9-28
10- 9	Sewage disposal plants, Mason City, Iowa	9-28
10- 9	**Sewers, Jacksonville, Fla.**	9-21
10- 9	Sewers, Boston, Mass.	10- 5
10- 9	Sewers, Brownsville, Pa.	10- 5
10- 9	Sewers, Dayton, Ohio	10- 5
10- 9	Sewers, Sewickley, Pa.	10- 5
10- 9	Sewers, Verona, Pa.	10- 5
10-10	Sewers, etc., Bellaire, Ohio	10- 5
10-11	Sewers, Woodsville, N. H.	10- 5
10-11*	**Sewers, etc., Colonial Beach, Va.**	8-24
10-12	Sewers, Cleveland, Ohio	10- 5
10-13	Sewer, Minster, Ohio	9-28
10-13	Sewer, Fullerton, Neb.	10- 5
10-14	Sewers, Centerville, Iowa	10- 5
10-15	Sewers, Birmingham, Ala.	9-28
10-15	Sewers, Geneva, Ohio	9-28
10-16	Sewer system, Jasper, Ind.	10- 5
10-17	Pumps, etc., New York	10- 5
10-17	Pumps, etc., New York	10- 5
10-18	Sewers, Lexington, Miss.	9-28
10-18*	Sewage screens, Baltimore, Md.	10- 5
10-20	Sewers, Payette, Idaho	9-21
10-25*	Sewers, Baltimore, Md.	10- 5
10-30	Sewers, Summerville, Ga.	9-21

Streets and Roads.

10- 5	Curbing, etc., Denver, Colo.	10- 5
10- 6	Grading, Falling Spring, W. Va.	10- 5
10- 6	Sidewalks, Linneus, Mo.	10- 5
10- 6	Sidewalk, Spencer, Iowa	10- 5
10- 6	Paving, Philadelphia, Pa.	10- 5
10- 6	Gravel roads, Crown Point, Ind.	9-28
10- 6	Paving, Indianapolis, Ind.	9-28
10- 6	**Road impvt., Cincinnati, O.**	9-14
10- 6	Sidewalks, Salt Lake City, Utah	9-28
10- 6	Grading, etc., Hastings, Minn.	9-28
10- 6	Grading and paving, Ravenna, Ohio	9-28
10- 6	Road improvement, Cincinnati, Ohio	9-28
10- 7	Gravel roads, Washington, Ind.	7-28
10- 7	**Grading, etc., Cleveland, O.**	9-14
10- 7	Paving, Milwaukee, Wis.	10- 5
10- 7	Grading, etc., Richmond, Va.	10- 5
10- 8	Grading, etc., Upper Marlboro, Md.	10- 5
10- 9	Road construction, Sedalia, Mo.	10- 5
10- 9	Paving, etc., Sewickley, Pa.	10- 5
10- 9	Grading, New Castle, Pa.	10- 5
10- 9	Paving, etc., Harrisburg, Pa.	10- 5
10- 9	**Gravel road, Williamsport, Ind.**	9-21
10- 9	**Paving, etc., Wilkes-Barre, Pa.**	9-28
10- 9	**Regulating, etc., New York.**	9-28
10-10	**Highways, New Orleans, La.**	9-28
10-10	**Paving, etc., Caldwell, Ohio.**	9-14
10-10	**Gravel road, Bluffton, Ind.**	9- 7
10-10	Paving, etc., Bellaire, Ohio	10- 5
10-10	Curbs and gutters, New York, N. Y.	10- 5
10-10	Paving, etc., Pasadena, Cal.	10- 5
10-11	Paving, etc., New York, N. Y.	10- 5
10-11	Grading and paving, Zanesville, Ohio	10- 5
10-12	Grading, etc., Columbus, Ohio	10- 5
10-13	Paving, etc., Chardon, Ohio	10- 5
10-13	Curb, Sanderson, Tex.	10- 5
10-13	Road construction, Winchester, Ind.	9-28
10-14	Grading, etc., Murphy, N. C.	10- 5
10-14	Grading and paving, Warren, Ohio	10- 5
10-15	Curbing, etc., Superior, Wis.	10- 5
10-16	Repaving, etc., Yonkers, N. Y.	10- 5
10-17	Grading and paving, Lisbon, Ohio	10- 5
10-18	Grading and paving, Upper Sandusky, Ohio	10- 5
10-18	**Road improvement, Pleasant Ridge, Ohio**	9-28
10-19	Grading, etc., Tremont, Ohio	10- 5
10-21	**Gravel road, Williamsport, Ind.**	9-14
10-25	Grading, etc., Cleveland, Ohio	10- 5
10-27	Road improvement, Cincinnati, Ohio	10- 5
10-30	Grading, etc., Moulton, Ala.	10- 5
11- 6	Stone road, Jasper, Ind.	10- 5

Miscellaneous.

Bids close.		Noted in issue of
10- 5	Asphalt, etc., Superior, Wis.	10- 5
10- 5	Bathing pavilion, Milwaukee, Wis.	10- 5
10- 5*	Channel excavations, Chicago, Ill.	10- 5
10- 5	Power boats, Tompkinsville, N. Y.	10- 5
10- 6	Cement, etc., Toledo, Ohio	10- 5
10- 6	Cable, Columbus, Ohio	10- 5
10-6	**Reinforcing grids, etc., Panama (U. S. Poss.)**	9-21
10- 7	**Piers, New York, N. Y.**	9-21
10- 7*	**Dredging, etc., New York**	9- 7
10- 7	**Piers, Washington, D. C.**	9-14
10- 7	**Dredging, Raritan, N. J.**	9-14
10- 9	**Levee, Pecan Point, Ark.**	9-21
10- 9	**Hydroelectric station, Panama, (U. S. Poss.)**	9-21
10- 9	**Tug, Portland, Ore.**	9-21
10- 9	Channel work, St. Charles, Mo.	9-28
10- 9	Fire protection work, New York	9-28
10- 9	Steel rods, bars, etc., Panama (U. S. Poss.)	10- 5
10- 9	Asphalt cement, etc., Cleveland, Ohio	10- 5
10-10	Ditch, Colfax, Neb.	10- 5
10-10	Wire cloth rivets, Washington, D. C.	10- 5
10-10	Road binder, New York	10- 5
10-10	Lumber, Norfolk, Va.	9-28
10-10	Crane, Brazil (Foreign)	9-21
10-10	**Excavation, Brinkley, Ark.**	9-21
10-16	Rock, Alpena, Mich.	9-14
10-10*	**Mail - handling apparatus, Washington, D. C.**	8-31
10-10*	**Mechanical equipment, Washington, D. C.**	8-31
10-10	**Elevator plant, Washington, D. C.**	8-31
10-11	Wharf improvement, Petewawa, Ont.	9-28
10-11	Wharf, Cache Bay, Ont.	9-28
10-11	Filling, Three Rivers, Que.	9-28
10-11	Drainage ditches, Brownsville, Tex.	9-28
10-11	White lead, New York	10- 5
10-12	Wire, Washington, D. C.	10- 5
10-12	**Dredging, Hawaii (U. S. Poss.)**	9- 7
10-14	**Lock, Louisville, Ky.**	9-14
10-16	Steel cells, Oroville, Cal.	9-28
10-16	Steel rails, etc., Ottawa, Ont.	9-28
10-16	Rock, Detroit, Mich.	9-28
10-16	Lumber, Panama (U. S. Poss.)	
10-16	Fire hose, New York	10- 5
10-16	Elevator, etc., New York	10- 5
10-16	Fire protection, New York	10- 5
10-16*	Drainage canal, Pine Bluff, Ark.	10- 5
10-17	Wire, Washington, D. C.	10- 5
10-17	Concrete wall, Trenton, N. J.	9-28
10-17*	Concrete drain, Trenton, N. J.	9-28
10-17*	**Garbage plant (Garbage), Paterson, N. J.**	8-31
10-17*	Steel and cast iron, New Orleans, La.	9-21
10-18*	Lock valves, gates, etc., Dallas, Tex.	9-21
10-18*	Trolley wire, poles, etc., Toronto, Ont.	9-28
10-18	Tile drains, Buffalo Center, Iowa	10- 5
10-19*	Harbor board hearings, New York	9-28
10-20	Removing wreck, Jacksonville, Fla.	9-28
10-21	**Waterfront impvts., Boston, Mass.**	9-21
10-21	**Roof covering, Norfolk, Va.**	9-21
10-23	Mechanical equipment, Bellingham, Wash.	10- 5
10-23	Dredging, Wilmington, Del.	10- 5
10-24*	Barge canal, Albany, N. Y.	9-28
10-27*	Dredging, Charleston, S. C. (See "Proposals")	9-28
10-27	Hydro-electric plant, Panama (U. S. Poss.)	10- 5
10-27*	Canal work, Charleston, S. C.	10- 5
10-30*	Jetty construction, Wilmington, Del.	10- 5
11- 1*	Subway, etc., Toronto, Ont.	10- 5
11- 8*	Water tube boilers, Philippine Islands (U. S. Poss.)	
11-10	**and 11, storehouse, Hawaii (U. S. Poss.)**	9-21
11-10	**and 11, Building, Hawaii (U. S. Poss.)**	9-21
11-11	**Storehouse, Hawaii (U. S. Poss.)**	9-21
11-14	**Castings, cylinders, etc., Panama (U. S. Poss.)**	9-28
11-19	**Elec. lighting, Roumania (Foreign)**	9-21
11-20	**Electric towing locomotives, Panama (U. S. Poss.)**	
10-30	Trap rock, Hartford, Conn.	9-28
12- 1*	**Pumping machinery, India, (Foreign)**	——
12- 1	Drainage, Osceola, Ark.	10- 5
12- 4*	Condensers, pumps, etc., Philippine Islands (U. S. Poss.)	
12- 4	*Engines, generators, etc., Philippine Islands (U. S. Poss.)	
——	**Excavation, Shelburne Falls, Mass.**	9-28
12-27*	Dredges, San Francisco, Cal.	10- 5

Examinations.

Examination date.		Noted in issue of
10- 6	Inspector of Masonry Construction, New York, N. Y.	10- 5
10-11	Inspector of regulating, grading and paving, New York, N. Y.	10- 5
10-25	Assistant Chemist, Washington, D. C.	10- 5
10-25	Laboratory Assistant in Chemistry, Washington, D. C.	10- 5
10-25	Junior Chemist, Washington	10- 5
10-25	Laboratory Assistant in Engineering, Washington, D. C.	10- 5
10-25	Laboratory Assistant in Physics, Washington, D. C.	9-28

CURRENT PRICES OF ENGINEERING MATERIALS

Supplement to ENGINEERING NEWS, appearing in the First Issue of Every Month. New York, October 5, 1911.

PRICE CHANGES AND THE BUSINESS OUTLOOK.

Pessimism is less prevalent among business men and financiers in New York, but optimism is less boasted of in the South and West.

The volume of business in many lines of industry is not more than 75% of normal. The steel trade and the copper trade are running along at approximately this rate. Building industry is not especially active. The greatest decrease in business following the lines mentioned in these columns several times in the past year is mainly in the railway supply business. The falling off in the volume of business is not the most serious factor in the situation, but the narrow margin of profit is the continued complaint of business houses in general. In the steel trade, in the copper market, and particularly in the cement industry profits have dwindled down to almost nothing, in some cases makers are not getting back a new dollar for an old one, when overhead charges are considered at a proper basis.

Another cut in the price of cement brings a quotation for Portland cement in bulk at the mills of the Lehigh Valley District at 65 cts. per bbl. The cement trade has never been as demoralized as at present and the price has never been so unremunerative to the cement mills. The hopes for the cement industry are only in a larger consumption or a smaller production. If some of the small mills should combine it might mean a smaller production, but for the owners of these mills, it would mean a practical wiping out of all their assets as such a merger would have to be taken over at a fairly low capitalization. As far as any merger of the larger mills is concerned, that is out of the question.

The interpretation of the Sherman law by both the President and the Attorney General has been a matter of serious discomfort to the business world for more than a decade. Those who have treated it as a "dead letter" find that it is capable of being enforced and moreover will be enforced There is no doubt that the people of the country are determined that the trust shall be wiped out. While this does not mean the wiping out of any property, it does mean the abolition of monopolies, and where profits have been made on account of any restraint of trade these profits will be wiped out. If, however, the American Tobacco Co. can be reorganized and broken up into consistent parts as now seems to be the case, there is hope for almost any combination now existing.

A severe drop in security prices causes little comment in the business world. Speculation has, for the last few years, ceased to be a pastime for business men.

Some of the railroads whose financial standing is unquestioned and who have funds in their treasury or marketable securities are looking forward to making extensive improvements in these times of low prices.

Labor conditions are not rosy with the shopmen of the Harriman lines on strike and a tie-up in the New York building trades narrowly averted. The supply of labor is plentiful, but any attempt to force down labor on a horizontal scale would be a serious blunder on the part of industrial managers.

The assurance of a large, if not record-breaking crop will furnish export business and offset in a measure the smaller supply of other agricultural products.

The increases in the prices of the necessities of life, recently recorded, are due either to agricultural shortages in this or foreign countries or causes arising outside the United States.

LABOR.

The Lackawanna trackmen in the states of New York and Pennsylvania have been on strike but it has not seriously interfered with the operation of the road. Shopmen of the Harriman lines have gone out in some cases against their will. In New York the building trades are inactive and a lockout is threatened on account of the striking marble workers. Labor agencies in New York report that they have more orders for pick and shovel men than they can fill at the prevailing wage of $1.60. There are many men of this class out of work but they refuse to pay their railroad fare to out of town points. The supply of mechanics and skilled workmen is in excess of the demand. In the accompanying table is given a list of the wages of the building mechanics of the country, in some cases compiled from letters sent out from this office and others compiled by the Building Contractors' Council in Chicago.

RATE OF WAGES PER HOUR, PAID IN THE BUILDING TRADES.

Trades.	New York	Chicago.	Philadelphia.	St. Louis.	Boston.	Cleveland.	Baltimore.	Pittsburgh.	San Francisco.	Buffalo.	Los Angeles.	Newark.
Structural Iron Workers.	$0.62½	$0.66	$0.50	$0.65	$0.56¼	$0.65	$0.43¾ to .62½	$0.60	$0.62½	$0.50	$0.38 8/9	$0.56¼ to .62½
Building Laborers......	.37½	.37½	.20 to .25	.20 to .25	.20 to .25	.25	.18½	.25 to .35	.31¼	.22½ to .25	.31¼	.18¾ to .25
Carpenters	.62½	.60	.50	.60	.50	.37½ to .45	.37½ to .42¾	.45	.62½	.45	.43¾	.50
Granite Cutters	.62½	.68¾	.50	.62⅓	.44½ to .50	.50	.50	.50	.62½	.50	.50	.81¼
Lathers	.62½	.68¾	.20 to .30	.62½	.55	.56¼	.50	.56¼	.62½ to .75	...	.50	.62½
Painters	.50	.60	.40	.55	.45½	.37½ to .42½	.32 to .38	.42½	.56¼	.40 to .45	.37½	.44
Plumbers	.67½	.68¾	.43⅜	.66¼	.55	.56¼	.42¾	.56¼	.75	.50	.56¼	.56¼
Stone Cutters	.62½	.62½	.50	.56¼	.50	.56¼	.50 to .56¼	.56¼	.62½	.50	.56¼	.43¾ to .62½
Sheet Metal Workers...	.59⅜	.62½	.35 to .40	.60	.50	.34⅜ to .43¾	.40	.45	.68¾	.37½ to .42½	.50	.56¼
Steam and Hot Water Fitters	.67½	.70	.43¾	.68¾	.55	.56¼	.42¾	.56¼	.75	.50	.56¼	.56¼
Handy Men	.37½	.37½	.20 to .30	.20 to .25	.20 to .25	.25	.18½	.18 to .30	.31¼	.22½ to .25	.31¼	.18¾ to .25
Brick layers	.62½	.70	.62½	.70	.60	.62½	.62½	.62½	.87¼	.60	.75	.65
Plasterers	.62½	.68¾	.62½	.75	.65	.62½	.62½	.62½	.87½	.55	.62½	.65

CEMENT, LIME AND BRICK.

Cement.—Prices of cement are down to 65 cts. a bbl. in bulk at mill. This means a quotation of $1.33 New York with an allowance of 40 cts. for bags returned. The reduction in quotations did not stimulate any new business, consumers being afraid to buy or to contract ahead for any large quantities. Some mills will not take long term contracts at present quotations and some consumers are unwilling to place long-time contracts with some of the mills. There was an attempt to call a meeting among the smaller producers in the Lehigh Valley district late in the month, but this was a failure. The few who responded to the call were unable to formulate any plan of procedure to help the market. With some of the mills cement is now selling below the cost of production. How long this business can go on can only be determined by the credit of the mills. Obviously, they cannot keep losing money for any great length of time. With many the alternative of closing down is a more pleasant one, as the loss will not be as great. The feelings of the trade that the new owners of the leading mill would bring about more harmony have been shattered and probably the cement business has never been in a more disorganized state than at present.

As regards the volume of business at present, it is fair, probably 80% of normal, largely because it is the wish of many contractors to close up work before the Winter sets in, but this is usual in late September. Outside the Eastern territory cement mills are in a fair way. In the West there is a good volume of business at fairly remunerative prices. In Canada, the consolidation evidently has helped matters and there have been numerous reductions in prices. Cement is selling in Canada now on a basis of about $1.25 per bbl. in bulk at mills. Many of the Canadian mills, however, are not equipped to turn out cement economically and in consequence this seemingly high price does not afford a tremendous profit. Steps, however, are being taken to gradually reduce the price and bring it more commensurate with that formerly obtained in this country.

Natural Cement.—Business continues very dull and the output is small. In New York 80 cts. per bbl. is named and in Boston $1.05.

Plaster Blocks.—For large lots, prices are as follows:

	Weight, lbs. per sq. ft.	Price, cts. per sq. ft.
2-in...............	7	6
3-in...............	8½	6½
4-in...............	11	7¼

These blocks are made 32-in. long by 13½-in. wide, containing 3 sq. ft. of surface. The 2-in. blocks are solid, but the others are hollow.

Plaster boards, ⅝-in. thick, are 16 cts. per sq. yd.

Lime.—The following prices are for lots of 500 bbls. delivered in New York City: State common, per bbl., 75 cts.; Rockland-Rockport, common, 92 cts.; Rockland-Rockport special, 300 lbs., $1.37; finished, 300 lbs., $1.47; finishing, 200 lbs., $1.02, and 350 lbs., $1.62; New Milford, $1.30.

Brick.—The makers of brick in the east have had an unsatisfactory season and they are now stacking brick rather than attempt to force it on the market at the prevailing price. The present demand is fair on account of the near approach of winter.

White enameled brick are held at the unchanged price of $60 per thousand for the American size (8¾ × 2¼-in. enameled surface by 4⅛-in. bed), and $70 to $75 for the English size (9 × 3-in. enameled surface by 4½-in. bed). These prices are f. o. b. Perth Amboy.

BUILDING STONE.

Blue Stone.—The demand for curb in the Bronx has been so large that prices are about 5 cts. per ft. higher.

For delivery, either along side of dock or f. o. b. cars, New York, prices are as follows: Flagging, 6 cts. per sq. ft. per in. of thickness; flagging, 2½ to 3-in. thick, that will pass New York City specifications, 18 to 19 cts. per sq. ft. Sewer bottoms, 5 ft. sq. and 3-in. thick, are sold at 25 cts. per sq. ft. Curbing, 5 × 16-in., is 45 cts., and 5 × 25-in., by 5-in. thick, is 60 cts., and 6-in. thick is 65 to 70 cts. per lin. ft., 5 × 20-in. by 5-in. thick is 55 cts.

Promiscuous shapes of building and foundation stone sell at 70 to 75 cts. per cu. ft.

Granite.—The demand for granite has fallen off and in consequence the supply being received is nearly equal to the requirements. Prices continue unchanged. Run of quarry can be had at 40 to 45 cts. per cu. ft. Pink Milford granite is without change at $1 per cu. ft. for promiscuous shapes.

Limestone.—Prices are without change at 85 cts. per cu. ft., delivered alongside of dock, New York. Dressed stone is quoted at $1.25 to $1.50 per cu. ft.

Sandstone in the rough is 80 cts. to $1 per cu. ft.

Interior Stone.—Slate flooring, 1-in. thick, can be had at 20 cts. per sq. ft. for the common or ribbon variety. Clear black sells at 35 to 40 cts., and the same price is asked for Vermont. A combination of slate and marble flooring is 30 cts. per sq. ft.

Marble floor, finished ready to lay, of Vermont marble, is 50 to 70 cts. per sq. ft.; Italian marble, 70 to 90 cts. Tennessee marble can be had at 65 cts. Ordinary stair work, such as slate steps, are quoted at 24 cts. per sq. ft.

IRON AND STEEL.

Pig Iron.—Prices show little change compared with a month ago, but it cannot be said that the market is broadening and the fact that furnaces are willing to accept orders for next year's delivery at quotations now prevailing has not helped the situation. Consumers believe that nothing can be gained by buying ahead and so are disposed to hold off and buy only as their needs warrant. Eastern foundries have bought perhaps more iron than those in other parts of the country. These orders, however, have only been for a few hundred tons, or at best less than 5,000 tons. Stocks of iron have been brought down to a lower figure, which somewhat strengthens the situation. It is probable that during part of the month of September the shipments of iron from furnaces exceeded the production. The failure of the Canadian Reciprocity Bill was somewhat of a below to the Buffalo furnace interests.

For lots of 100 gross tons and over f. o. b. points named quotations are as follows: Cincinnati, Southern Foundry, No. 1, $14 to $14.25; Southern Foundry No. 2, $13.25 to $13.75; Southern Foundry No. 4, $12.50 to $13. In Philadelphia, Eastern Pennsylvania No. 2 × Foundry is $15 to $15.25 and Eastern Pennsylvania No. 2 plain is $14.75 to $15. In Chicago, Northern Foundry No. 2 is $14.50 to $15; Southern Foundry No. 2, $14.35 to $14.85. In Pittsburgh, Bessemer iron is unchanged at $15.90, and basic is 40 cts. lower at $13.50. These prices include the 90-ct. freight rate from the valley to Pittsburgh. In New York, Northern Foundry No. 2X is $15 to $15.25, and Southern Foundry No. 2 is $14.75 to $15. In Birmingham, Southern Foundry No. 2 is held at the slightly higher figure of $10.50.

Steel Rails.—One of the largest inquiries for rails received this month was for 30,000 tons for the Norfolk & Western. There is also a very fair export business. The rail mills are fairly active but, of course, are not running anywhere near capacity. There will be more inquiries for Canada later in the year and it is probable that considerable tonnage will be rolled in 1912 for Canadian roads. At best, however, the market is only a waiting one and there is keen competition for all orders.

Quotations are as follows for lots of 500 tons and over: Standard sections, 50 to 100 lbs. per yard, 1.25 cts. per lb.; 40 to 45 lbs., 1.16 cts.; 30 to 35 lbs., 1.20 cts.; 16, 20 to 25 lbs., 1.21 cts., and 12-lb. rails, 1.25 cts. Relaying rails are slightly lower in New York, at $20 to $21 per gross ton. In Chicago, standard sections, subject to inspection, are steady and unchanged at $24.

Track Supplies.—The demand is only fair but prices continue without change from last month at $1.60 per 100 lbs. Pittsburgh. In Chicago prices are likewise without change, at $1.65 to $1.70. The extras are unchanged and repeated from last month as follows:

Railroad Spikes.		Cents.
3, 3½, 4, 4½ and 5 × ½......	Extra	.10
3½, 4 and 4 × 7/16...........	Extra	.20
3, 3½, 4 and 4½ × ⅜........	Extra	.30
2½ × ⅜......................	Extra	.40
2½, 3 and 3½ × 5/16........	Extra	.60
2 × 5/16.....................	Extra	.80
Boat Spikes.		
⅜ in. square, 8 to 16 in. long.	Extra	.15
⅝ in. square, 2 to 16 in. long.	Extra	.15
½ in. square, 6 to 16 in. long.	Extra	.15
7/16 in. sq., 6 to 12 in. long.	Extra	.20
⅜-in. square, 4 to 12 in. long.	Extra	.30
5/16 in. sq., 4 to 8 in. long..	Extra.	.45
¼ in. square, 4 to 8 in. long.	Extra	.75
¼ in. sq., 3 to 3½ in. long..	Extra	1.00

Structural Steel.—One of the most important inquiries received in the structural steel market was for 10,000 tons of bridge material for the Central

R. R. of N. J., but this material will not be required for at least a year, which shows that the prevailing low prices are a sufficient temptation for some consumers who have the money to pay for their supplies to enter the market. There are a few railroads in the same enviable position as this one and much business may be developed along these lines, as structural steel prices are exceptionally low. There is very little new building work in New York, except such as has been already mentioned, and the steel contracted for. Outside of New York business is likewise light as far as large structures are concerned, but there is a great deal of business being developed for small buildings. The market is practically on a basis of 1.30 cts., but some sales have been made at a lower figure and it is believed that on desirable orders for a large tonnage as low as 1.27½ cts. could be made. The following revised quotations take into consideration the recent shading of prices and are as follows in cents per lb. f. o. b. Pittsburgh:

I-beams and channels, 3 to 15-in., 1.27½ to 1.30 cts.; over 14-in., 1.40 to 1.45 cts.; H-beams over 18-in., 1.50 to 1.55 cts.; angles, 3 to 6-in. inclusive, 1.30 to 1.35 cts.; angles over 6-in., 1.40 to 1.45 cts.; tees, 3-in. and over, 1.35 to 1.40 cts.; zees, 3-in. and over, 1.30 to 1.35 cts.; deck beams and bulb angles, 1.60 to 1.65 cts.; hand rail tees, checkered and corrugated plates, 2.45 cts.

Mill shipments in the Chicago territory are quoted at 1.53 cts. base and 1.75 base from store.

Cast-Iron Pipe.—The market is much less active and consumers apparently are little interested. One of the best contracts placed recently was for 8,900 tons of 40-in. pipe for the New York Board of Water Supply. Kansas City will require about 2,000 tons and a Michigan city is in the market for 900 tons.

In Birmingham, slightly higher quotations are asked as follows: 4 to 6-in., $23; 8 to 12-in., $22; over 12-in., $21.

Chicago, 4-in., $26.50; 6 to 12-in., $24.50; 16-in., $24.

San Francisco, 4-in., $35; 6 to 12-in., $34.

New York, 6-in., $21 to $22.

Plates.—No large orders for cars have been taken but there are some orders in prospect. Several orders for steel coaches have been booked and this business promises to increase. It does not call for a very large tonnage.

Quotations are again lower, the base price for wide plates being 1.25 to 1.30 cts. Pittsburg.

The base price of 1.35 cts. for wide plates continues: Plates ¾-in. thick, 6¼ to 100 ins. wide, 1.35 to 1.40 cts.; ¼ to 3/16 ins. thick, 1.45 to 1.50 cts.; 3/16 ins. and thinner, including No. 8 gage, 1.50 to 1.60 cts.; Nos. 8, 9 and 10 gage, 1.65 to 1.70 cts. All these prices are per lb. f. o. b. mill. In Chicago, store prices are 1.80 to 1.85 cts.

Old Materials.—It is difficult to conceive of a poorer market with any business at all. Dealers will not buy for they cannot sell steel scrap to rolling mills or cast scrap to foundries. There is no incentive to buy for speculative purposes as there was in 1908 for the yards are full. Rolling mills are refusing shipments on the smallest excuses.

The following quotations are largely nominal because of the absence of business.

Prices in New York, per gross ton, are as follows:

Heavy - melting steel scrap	$9.75 to $10.00
No. 1 yard wrought, long.	10.50 to 11.00
No. 1 yard wrought, short	9.75 to 10.00
No. 1 railroad wrought..	11.75 to 12.00
Pipes and flues	9.50 to 10.00
Cast borings	5.00 to 5.50
Machinery cast, broken up	10.00 to 10.50
Stove plate	8.00 to 8.50
Malleable castings	10.00 to 10.50

In Chicago, quotations are again lower as follows:

	Per gross ton.
Re-rolling rails	$12.25 to $12.75
Heavy - melting steel scrap	10.00 to 10.50
	Per net ton.
Miscellaneous railroad wrought No. 1	$10.50 to $11.00
Miscellaneous railroad wrought, No. 2	9.50 to 10.00
Machine shop turnings..	6.00 to 6.50
No. 1 cast scrap	10.25 to 10.75
Pipes and flues	7.50 to 8.00
Railroad malleable	9.75 to 10.25
Agricultural malleable..	9.00 to 9.50

In Pittsburgh the mills are taking as little scrap as possible and dealers are being requested to hold up shipments. Quotations are as follows f. o. b. Pittsburgh:

	Per gross ton.
Re-rolling rails	$13.00 to $13.25
No. 1 foundry cast	12.75 to 13.00
No. 2 foundry cast	12.25 to 13.00
Old grate bars	9.50 to 9.75
Car wheels	12.50 to 12.75

Roofing Corrugated.—While the demand has not fallen off to the same extent as in other steel products there is no snap to the business.

Quotations are unchanged, as follows per 100 sq. ft. of roofing surface, in carload lots f. o. b. Pittsburgh: No. 28, painted, $1.40; galvanized, $2.55; No. 27 painted, $1.55; galvanized, $2.60; No. 26, painted, $1.65; galvanized, $2.65; No. 24, painted, $2.10; galvanized $3.15; No. 22, painted, $2.60; galvanized, $3.70.

Corrugated sheets from store New York are held as follows per 100 sq. ft. of roof surface: No. 28, painted, $2.50; galvanized, $3.65; No. 26, painted, $2.85; galvanized, $3.90; No. 24 painted, $3.75; galvanized, $4.70.

Sheets.—The market has in some ways developed a stronger tone and the mills are running to about 75% of capacity. The quotations given below are at times shaded to the extent of $1 a ton.

Prices f. o. b. Pitsburgh are as follows:

	Cts. per lb. Black.	Cts. per lb. Galvanized.
Nos. 10 and 11	1.60	1.95
Nos. 12, 13 and 14	1.65	2.05
Nos. 15, 16 and 17	1.70	2.20
Nos. 18, 19, 20 and 21	1.85	2.35
No. 22	1.80	2.35
Nos. 23 and 24	1.80	2.45
Nos. 25 and 26	1.90	2.65
No. 27	1.95	2.80
No. 28	1.95	2.95
No. 29	2.00	3.05
No. 30	2.00	3.25

	Cts. per lb. Black.	Cts. per lb. Galvanized.
No. 10	2.15	2.70
No. 12	2.15	
No. 14	2.20	
No. 16	2.30	2.80
Nos. 18 to 22	2.45	2.95
No. 24	2.50	3.05
No. 26	2.60	3.25
No. 27	2.70	3.40
No. 28	2.90	3.55
No. 30	3.10	4.00

Steel Castings—Prices continue without change. Open hearth steel castings, weighing from 100 to 500 lbs., are 7½ to 9 cts. per lb.

Freight Rates.—The freight rates on finished steel products, from the Pittsburgh district, including plates, structural shapes, merchant steel and iron bars, pipe, fittings, plain and galvanized wire, nails, rivets, spikes and bolts (in kegs), black sheets (except planished), chain, etc., are as follows, in cts. per lb.; Albany, 16; Buffalo, 11; Boston, 18; Baltimore, 14½; Canadaigua, 13½; Cleveland, 10; Columbus, 12; Cincinnati, 15; Chicago, 18; Denver, Colo., 85½; Harrisburg, 14½; Louisville, 18; New York, 16; Norfolk, 20; Philadelphia, 15; Rochester, 11½; Richmond, 20; Scranton, 15; St. Louis, 23; Washington, 14½.

Castings Gray Iron.—Building castings can be had at 1.62½ to 2 cts. per lb., depending on the size of the order and shape of the casting. Stair work is 2 to 2.50 cts. per lb. Rough castings, such as foundation pieces, sewer work, and similar heavy pieces, are 1.50 to 1.75 cts. per lb.

Rivets.—Business is not at all active and prices are lower. Structural rivets can now be had at 1.60 to 1.65 cts. base and boiler rivets at 1.70 to 1.75 cts. base. Structural rivets, ¾-in. and larger, take base price; cone heated boiler rivets, ¾-in. and larger, take base price of boiler rivets; ⅝ and 11/16-in. take an advance of 15 cts., while ½ and 9/16-in. take an advance of 50 cts. Lengths shorter than 1-in. take an advance of 50 cts.

Merchant Pipe.—Practically all manufacturers of merchant steel pipe, who have put out a new basing card, effective Oct. 2, showing a reduction of from $2 to $4 a ton on black steel pipe; a reduction of from $6 to $14 a ton on galvanized steel pipe, and a reduction of $2 a ton on extra strong and double extra strong pipe, have advised the trade that they will guaranty prices in case of decline up to Dec. 31 on all business booked during the 60 days prior to the issuing of a new card provided a new card is issued between Oct. 2 and Dec. 31. All mills are now quoting strictly on the new card. Present prices on merchant pipe, as shown on the card dated Oct. 2, are extremely low. That price concessions on merchant pipe have brought out some new business is indicated by the fact that some of the mills are operating on a very satisfactory schedule and have a fair amount of business on their books.

Merchant Shapes.—Quotations from store New York are as follows:

	Cts. per lb.
Refined iron:	
1 to 1⅞-in. round and square.	1.70
1½ to 4-in. × ⅜ to 1-in	
1½ to 4-in. × ¼ to 5-in	1.80
Rods:	
⅝ and 11/16 round and square	1.80
Angles:	
3-in. × ¼-in. and larger	1.90
3-in. × 3/16-in. and ⅛-in	2.30
1½ to 2½-in. × ⅛-in	2.05
1½ to 2¾-in. × 3/16-in. and thicker	1.95
1 to 1¼ × 3/16-in	2.05
1 to 1¼ × ⅛-in	2.10
⅞ × ⅛-in	2.20
¾ × ⅛-in	2.25
⅝ × ⅛-in	3.45
½ × 3/32-in	3.90
Tees:	
1-in.	2.35
1¼-in.	2.20
1½ to 2½ × ¼	2.00
1½ to 2½ × 3/16-in	2.10
3-in. and larger	3.95
Beams	1.90
Channels, 3-in. and larger	1.90
Bands, 1½ to 6 × 3/16 to No. 8..	2.10
"Burden's Best" Iron, base price	3.15
Burden's "H. B. & S." iron, base price	2.95
Norway bars	3.60
Bessemer machinery	1.90
Cast steel, base	7.00
Special cast steel, base	14.00

Piling Sheet Steel.—Prices are without change at 1.60 cts. per lb., f. o. b. Pittsburgh.

Wire Rope.—Prices are unchanged. The discount to the larger trade is 42½ and 5% from list for galvanized and 50 and 5% from list for bright. The net prices of bright wire rope are as follows:

Diameter, ins.	Price per foot. Cast steel.	Price per foot. Crucible steel.	Price per foot. Plow steel.
2½	$1.05	$1.24	$1.46
2¼	.85	1.05	1.22
2	.57	.65	.76
1¾	.55	.54	.64
1½	.32	.39	.45
1¼	.23	.28	.32
1	.15	.18	.21
¾	.10	.11	.13
⅝	.07	.09	.10
½	.06	.07	.07

Tin Plate.—Business is fair and the leading interest is receiving some good orders for export. The fall buying will probably start in a month.

Prices are unchanged. Terne plates or tin plates used for roofing purposes are sold by the box of 112 sheets. Store prices in New York are unchanged as follows: $8.70 per box for 20 × 28-in. I C plates with an 8-lb. coating; plates of the same size with a 15-lb. coating are $10.60; 20-lb. coating, $13.20, and 40-lb. coating, $16.70.

Lag Screws.—Cone point lag screws are sold at a discount of 80% from list. The net prices are as follows:

Length.	Diameter in inches— Net price per 100. ½-in.	¾-in.	1-in.
3½-in.	$1.04	$2.12	$4.40
4 -in.	1.11	2.26	4.66
4½-in.	1.10	2.40	4.92
5 -in.	1.25	2.47	5.18
6 -in.	1.40	2.82	5.70
7 -in.	1.59	3.10	6.22
8 -in.	1.68	3.38	6.74
9 -in.	1.83	3.66	7.26
10 -in.	1.87	3.94	7.78
11 -in.	2.11	4.22	8.30
12 -in.	2.26	4.59	8.82

Coke.—Prices are no lower but the output which increased during the middle of the month has since fallen off. In the last week of September the output was 311,000 tons, compared with 313,722 tons in August, 277,000 tons in July and 271,000 tons in June. For prompt shipment, furnace coke can be had at $1.50 to $1.55; for the remainder of the year contracts are made at $1.65 to $1.70 per net ton. The price of 72-hr. furnace coke is slightly firmer at $1.85 to $2 for prompt shipment, and contracts for future delivery are also a trifle firmer at $2.10 to $2.40.

Chain.—Prices are unchanged and the following are named for cask lots of 500 lbs. to consumers. The quotations are per 100 lbs. f. o. b Pittsburgh:

Sizes in ins.	Proof.	BB.	BBB.
3/16	$8.10	$9.35	$9.85
¼	5.55	6.80	7.30
5/16	4.55	5.80	6.30
⅜	4.00	5.25	5.75
7/16	3.70	4.95	5.45
½ and 9/16	3.50	4.75	5.25
⅝	3.40	4.65	5.15
¾	3.30	4.55	5.05
⅞	3.20	4.45	4.95
1	3.10	4.35	4.85
1⅛ and 1½	3.20	4.45	4.95

Prices for hand-made chains are unchanged:

Size in inches.	BBB crane chain.	BBB crane, dredge hoisting or steam shovel hoisting chain.	Special "Warwick" crane, hoisting steam shovel hoisting and dredge hoisting chain.	Special "Trident" crane, steam sh'v'l hoisting & dredge hoisting chain.
*⅝	$7.95	$8.20	$9.15	$9.15
¾	7.15	7.45	8.45	8.45
⅞	7.67	6.90	7.90	....
1	6.15	6.40	7.45	....
1⅛	5.75	5.95	6.90	....
1¼	5.65	5.90	6.85	....
1⅜ to 1⅞..	5.55	5.75	6.80	....

*Thickness

Spiral Riveted Pipe.—Prices continue unchanged from the last report. The prices given below are f. o. b. factory, freight equalized with New York City, being figured at a discount of 50, 10 and 10% from list.

They are for orders amounting to about $250. For large orders of several carloads, prices are from 12½ to 20% cheaper.

Diameter in ins.	of steel, Birmingham wire gage.	Net price per 100 ft With bolted joints complete. Plain.	As-phalted.	Galvan-ized.
3	20	$21.80	$14.21	$20.70
4	18	19.76	21.48	30.74
5	18	23.40	23.70	37.14
6	16	33.05	35.76	49.73
7	16	37.58	40.76	56.82
8	16	43.17	46.80	65.00
9	16	50.06	54.10	74.22
10	14	66.42	71.08	96.15
11	14	71.20	76.57	102.24
12	14	83.75	89.15	118.30
13	14	89.67	96.55	127.98
14	14	99.14	105.51	138.85
15	14	108.05	114.89	151.92
16	14	117.53	124.82	166.58
18	12	167.43	175.95	226.44
20	12	183.79	193.30	248.39
22	12	200.48	210.64	269.21
24	12	219.92	231.07	293.99
26	10	280.20	292.41	370.78
28	10	301.32	314.89	395.37
30	10	324.81	399.15	430.64

Nails.—No large orders a[illegible]ing received by manufacturers a[illegible]hey appear to be well satisfied th[illegible]de is as active as it is.

Wire nails in Pittsburgh [illegible] sold at $1.75 per keg base in car[illegible] lots to retail merchants. In less [illegible] carload lots, an advance of 10 cts [illegible] keg is demanded. In New York w[illegible]nails are sold from store at $2.00 p[illegible]g. Cut nails are now $1.65 per ke[illegible] carload lots from Pittsburgh, but [illegible] price in New York has been reduc[illegible] cts. per keg, and the base price i[illegible] $2.00. All these prices are per 10[illegible]

Wire.—Prices are firmer a[illegible] trade is not as dull as two month[illegible]. The advance amounts to about [illegible]per ton. Quotations are as follows:

For carload lots of wire [illegible]nealed, $1.65; galvanized, $1.95. Le[illegible]n carload lots are sold at an a[illegible] of 10 cts. per 100 lbs. Galvaniz[illegible]b wire is $2.15 and painted $1.85 [illegible] these quotations are per 100 lbs.

Swedish Steel.—Busines[illegible] quiet. Prices are without cha[illegible] Drill steel, either round, hexag[illegible]r octagon, is 6 cts. per lb. for all [illegible]s. ⅝ to 2 ins. For sizes 2⅛ to 3 i[illegible] cts. is quoted, and 3⅛ to 4 ins. is [illegible] cts. Hollow drill rod is held a[illegible]½ to 15 cts. for the imported.

Anvils of Swedish steel a[illegible] held at 9 to 9½ cts. per lb. They [illegible]h from 80 to 600 lbs.

Switch Points.—The follow[illegible] prices are named f. o. b. mill, for sw[illegible]h points in lots of ten or more pair[illegible]r 60-lb. rail, 10-ft. points, $16.25; 15-[illegible] points, $17.50 for 70-lb. rail; 10-ft. [illegible]nts, $18; 15-ft. points, $25; for 80-lb. [illegible]il, 10-ft. points, $25.50; 15-ft. points, $27.75; for 90-lb. rail, 15-ft. points, $30.[illegible] for 100-lb. rail, $33.50. All of the above are furnished with three rods, except the 10-ft. points for 60 or 70-lb. rail, which have only two.

Bolts.—Prices are unchanged from last month. The discount on common carriage bolts is 75 and 10% on bolts ⅜ × 6-in. and smaller. On larger and longer bolts the discount is 70 and 10%. At these discounts the net prices are as follows:

CARRIAGE BOLTS

Length ins.	Diameter inches— Net price per 100. ⅜	½	¾
4	$0.62	$0.99	$2.34
5	0.68	1.12	2.57
6	0.75	1.23	2.84
7	0.99	1.35	3.05
8	1.08	1.46	3.32
9	1.16	1.58	3.55
10	1.24	1.70	3.80
12	1.42	1.94	4.30
14	1.59	2.18	4.80
16	1.77	2.42	5.28
18	1.94	2.65	5.78
20	2.10	2.88	6.30

Frogs.—For mill shipments of ten or more, prices are as follows: Bolted frogs, No. 7, for 60-lb rail, $15; for 70-lb. rail, $16.50; for 80-lb. rail, $18; No. 8 frogs for 90-lb. rail, $21; for 100-lb. rail, $23. Plate frogs, No. 7, riveted to ⅝-in. plate for 60-lb. rail, $18; for 70-lb. rail, $20; for 80-lb. rail, $21.50. No. 8 frogs bolted to a ¾-in. plate for 90-lb. rail are $25.50; for 100-lb. rail, $27.50.

REINFORCING MATERIAL.

Interlocking Plates.—For interlocking steel plates, of 24 gage black steel, f. o. b. mill Central Ohio, the following prices are named:

Length.	Per 100 sq. ft. Weight.	Price. Flat Sheets.
Under 4 ft	100 lbs.	$11.00
4 to 6 ft	160 lbs.	10.00
6 to 8 ft	160 lbs.	9.50
8 to 10 ft	160 lbs.	9.00
10 ft	160 lbs.	8.50

Curved sheets are held at an advance of $11 per 100 sq. ft. over flat.

Triangular Mesh.—Business continues active at the reduced quotations. The following quotations are per 100 sq. ft. in lots of the size named, f. o. b. mill in Pittsburgh district:

Price per 100 sq. ft.

Style No.	Cross sec. area per ft. width.	Carload lots.	Less than carloads and over 10,000 sq. ft.
*4	.102	$0.97	$1.18
5	.077	.77	.94
6	.058	.61	.74
*7	.041	.47	.58
*23	.170	1.62	1.98
24	.142	1.40	1.71
25	.124	1.24	1.51
*26	.110	1.13	1.38
*27	.085	.92	1.13
28	.066	.77	.94
29	.049	.63	.77
31	.261	2.39	2.92
32	.225	2.07	2.53
33	.196	1.85	2.26
34	.146	1.42	1.73
35	.109	1.13	1.38
36	.075	.83	1.02
*38	.380	3.40	4.15
39	.324	2.93	3.58
40	.283	2.57	3.14
41	.208	1.96	2.39
*42	.151	1.49	1.82
43	.101	1.06	1.29

This material is made in regular widths of 18, 22, 26, 30, 34, 42, 46, 50, 54 and 58 ins. Standard lengths of rolls are 150, 300 and 600 ft. Cutting to special lengths is charged extra.

Bars, Concrete Reinforcing.—The price is again lower and 1.20 cts. per lb., base, is the general price f. o. b. Pittsburgh. This is sometimes shaded to the extent of $1 or $2 on a desirable order.

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*Made in both lighter and heavier gages at corresponding differences in price.

The net prices of bars of various sizes are as follows:

	Cts. per lb. Plain.	Cts. per lb. *Deformed.
¾-in. & larger..	1.20 to 1.30	1.25 to 1.35
⅝-in.	1.25 to 1.35	1.30 to 1.40
½-in.	1.30 to 1.40	1.35 to 1.45
⅜-in.	1.45 to 1.55	1.50 to 1.60
¼-in.	1.70 to 1.80	1.75 to 1.85

Bar from stock, Pittsburgh, are usually cut to the required length without extra charge. Prices per lb. are as follows:

	Cts. per lb. Plain.	Cts. per lb. Deformed.
¾-in. & larger.	1.40 to 1.60	1.50 to 1.60
⅝-in.	1.45 to 1.55	1.55 to 1.65
½-in.	1.50 to 1.60	1.60 to 1.70
⅜-in.	1.65 to 1.75	1.75 to 1.85
¼-in.	1.90 to 2.00	2.00 to 2.10

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*The price of deformed bars varied according to the shape, and some are held much higher than these prices.

Expanded Metal.— Quotations are without change as follows:

Mesh.	Gage-stubbs.	Designation.	Weight per sq. ft.	Sectional area per ft. width.	Price per sq. ft. in cts. Carload.	Price per sq. ft. in cts. 10,000 sq. ft. to carload.
¼-in.	18	Standard	.74	.209	3.71	4.04
¾-in.	13	Standard	.80	.225	3.69	4.03
1½-in.	12	Standard	.70	.207	3.43	3.76
2 -in.	12	Standard	.56	.166	3.20	3.48
3 -in.	13	Standard	.28	.087	1.32	1.44
3 -in.	10	Light	.50	.148	1.55	1.69
3 -in.	10	Standard	.60	.178	1.80	1.97
3 -in.	10	Heavy	.90	.267	2.46	2.69
3 -in.	10	Extra heavy........	1.20	.356	3.18	3.47
3 -in.	6	Standard	1.38	.400	3.85	4.20
3 -in.	6	Heavy	2.07	.600	5.64	6.16
4 -in.	16	Old Style	.42	.093	1.78	1.94
6 -in.	4	Standard	.84	.245	2.42	2.64
6 -in.	4	Heavy	1.26	.368	3.38	3.68

LUMBER.

The agitation for reciprocity with Canada although defeated has had a most beneficial effect on the lumber trade in the United States. It brought prices down at a time when there was a minimum of hardship, for with the recent falling off in trade prices would, of necessity be reduced.

At this time the markets are steady, stocks are low and should further curtailment take place the trade could quickly adjust itself to new conditions.

The Canadian cut of lumber in 1910 was, according to official reports, 4,900,000,000 ft. B. M. valued at $77,000,000.

Of the 26 native species of wood cut the first nine were softwoods, Spruce being the most important, as it furnished one-fourth of the total cut. Spruce and white pine together formed barely one-half of the 1910 cut, while in the year previous these two species made up nearly three-fifths of the total. This decrease in proportion is due not to a smaller cut of the two species but to a great increase in the amount of Douglas Fir, Hemlock, Cedar and Yellow Pine produced in British Columbia.

Long Leaf Yellow Pine.—Prices continue unchanged, and for delivery from yard in New York and vicinity, for material classed as "Merchantable" under the 1905 rules of the Association, prices are as follows:

Prices per Thousand Feet in Yard, New York.

	Length. 20 ft. base.	21 to 25 ft.	26 to 30 ft.	31 to 35 ft.
2 in. wide and under by 8 in. thick and under..	$31	$32	$33	$34
10 in. wide by 10 in. thick and under..	33	34	35	36
12 in. wide by 12 in. thick and under..	36	37	38	39
14 in. wide by 14 in. thick and under..	43	44	46	46
16 in. wide by 16 in. thick and under..	45	46	47	48

For pieces longer than 35 ft. and less than 40 ft., add from $4 to $8 to base price.

Spruce.—In Boston wholesale prices are as follows:

	Per 1,000 ft.		
9-in. and under........	$23.50	to	$24.00
10 to 12-in.............	23.50	to	24.00
2 × 4-in. random.......	20.00	to	....
2 × 6-in. random.......	19.50	to	20.00
2 × 8-in...............	21.50	to	22.00
2 × 10-in..............	22.50	to	23.50
2 × 12-in..............	22.50	to	23.50

Flooring.—The demand continues steady and prices are without change. Quarter-sawed oak flooring, A1, is $95 per M. Selected, quarter-sawed, white oak or red oak flooring is $52 per M., and common oak flooring, red or white, is $30 per M.

Maple flooring, 13/16 × 2 ins., is $44 for clear; $37 for No. 1 and $24 for factory.

Long-leaf yellow pine flooring, 13/16 × 2½ face, is $55 to $60 for A heart rift; $40 for sap rift; $28 to $30 for flat rift and $22 to $23 for No. 1 common flat grain.

Hemlock.—The market is firm and there are no sellers at less than $21 for Pennsylvania and $20.50 for West Virginia. The price from cars in the vicinity of New York is 50 cts. higher than last month.

Price Per Thousand, f. o. b. cars, New York.

Size.	Length. 10 ft.	12 ft.	14 ft.	16 ft.
2 × 4-in...	$23.00	$21.00	$21.00	$23.00
2 × 6-in. to 2 × 10-in	21.00	21.00	21.00	18.00 to 19.00
3 × 4-in. to 12 × 12-in.	21.50	21.50	22.00	19.00 to 20.00
1 × 8-in...	....	18.00	18.00	18.00
1 x 10-in. & 1 × 12-in.	....	18.50	18.50	18.50

Lath.—The price is steady. In Boston 1⅝-in. sells at $3.75 and 1½-in. at $3.40 to $3.50.

Cross Ties.—The demand from the railroads has been light and prices are more or less nominal. In New York, the G. S. Baxter Co., 15 William St., quote prices from last month as follows:

	Cents each.
7 × 9-in. by 8 ft. 6-in........	75
6 × 9-in. by 8 ft.....nominal	72
6 × 8-in. by 8 ft.............	67

Second-class, sound and square edge, are quoted as follows:

	Cents each.
7 × 9-in. by 8 ft...........	61
6 × 9-in. by 8 ft.....nominal	51
6 × 8-in. by 8 ft....nominal	45

CLAY PRODUCTS.

Hollow Tile—The demand is somewhat larger than a month ago due to a desire, on the part of contractors, to finish the work in hand.

Prices are without change for hollow wall building tile, f. o. b. factory, Perth Amboy, N. J., as follows:

Size.	Price per block, in cts.
4 × 12 × 12-in............	5.25
6 × 12 × 12-in............	6.6
8 × 12 × 12-in............	10.5
10 × 12 × 12-in............	10.5
12 × 12 × 12-in............	12.1

Fireproofing partition blocks are unchanged as follows:

Size.	Price per block, in cts.
2 × 12 × 12-in............	4.4
3 × 12 × 12-in............	4.4
4 × 12 × 12-in............	5.
6 × 12 × 12-in............	6.6
8 × 12 × 12-in............	8.8

These prices are for what would be considered small orders—approximately carload lots. For quantities which exceed $1,000 worth of material concessions will be made.

Duct Telephone.—Small lots are sold at 4¼ to 5 cts. per duct ft., but considerable concessions are made for desirable orders.

Sewer Pipe.—Quotations continue without change, and the demand is somewhat larger. Discounts applying to the Eastern list are as follows: For all sizes up to and including 24-in., 84% discount; for 27 and 30-in., 76% discount; for 33 and 36-in., 71% discount.

At these discounts the net prices per ft. for carload lots, f. o. b. factory, are as follows:

3-in........................	$0.032
4-in........................	.04
5-in........................	.048
6-in........................	.064
8-in........................	.087
10-in........................	.128
12-in........................	.16
15-in........................	.215
18-in........................	.30
20-in........................	.36
21-in........................	.43
22-in........................	.48
24-in........................	.52
27-in........................	1.09
30-in........................	1.22
33-in........................	1.78
36-in........................	2.04

Roofing Tile.—Prices are steady and continue without change. The best grade for promenade roofing tile in flat blocks for high-grade roofs is sold at $20 per M. for run of kiln, and $30 per M. for selected. A cheaper form of tile with a smooth surface can be had at $10 to $12, but it is not suitable for roof gardens. These prices are for 9 × 9-in. blocks, f. o. b. factory. It requires 258 blocks to lay 100 sq. ft. of roof surface and, in consequence, the price per 100 sq. ft. of roof surface would be $4 to $5 for the smooth blocks; $7.82 for run of the kiln, and $10.73 for the selected.

Vitrified tile, unglazed, of the French or Spanish type is sold at approximately $8.50 per 100 sq. ft. of roof surface, f. o. b. factory. Glass tiles are sold at 60 cts. each. It requires 183 of these for 100 sq. ft. of roofing.

Flue Lining.—Prices continue without change. The discount from list, f. o. b. mill, is 85%. Delivered in New York, in small lots, they can be had at 78%. Based on a discount of 85% at the mill, net prices are as follows:

	Weight in lbs.	Price per ft.
4½ × 8½-in...........	14	$0.04½
4½ × 13 -in...........	20	.068
4½ × 18 -in...........	40	.015
6 × 12 -in...........	22	.075
7 × 7 -in...........	15	.053
8½ × 8½-in...........	18	.068
8½ × 13 -in...........	28	.098
8½ × 18 -in...........	45	.135
12 × 16 -in...........	45	.15
13 × 13 -in...........	38	.128
13 × 18 -in...........	57	.18
14 × 16 -in...........	60	.165
16 × 16 -in...........	65	.24
16 × 20 -in...........	80	.30
18 × 20 -in...........	75	.30

MILL SUPPLIES.

Shafting.—Trade is not active and there is considerable price cutting. The general asking price for carload lots is 60% discount from list but enough sales have been made at 60% and 5% to establish that quotation for large lots. On a good order probably 60 and 10% could be done. For less than carload lots 55% is the general price.

The following net prices per foot are based on the discount of 55%; ¾-in., 3.75 cts.; 1-in., 6.65 cts.; 1¼-in., 10.40 cts.; 1½-in., 13.50 cts.; 1¾-in., 18.30 cts.; 2-in., 23.70 cts.; 2¼-in., 31.45 cts.; 2½-in., 37.53 cts.; 2¾-in., 45.40 cts.; 3-in., 54.13 cts.; 3½-in., 82.60 cts.; 4-in., $1.15; 4½-in., $1.50; 5-in., $2.10; 5½-in., $2.74; 6-in., $3.48.

Belting.—The market is not at all active and prices continue without change.

Discounts on rubber belting are as follows: Best grades, 40 and 10% to 50%; standard, 50 and 10% to 60%; competitive grades, 60, 10 and 10% to 70%. The discounts on leather belting are unchanged as follows: Extra heavy, 60%; heavy, 60 and 5%; medium, 70%; light, 70 and 5%; standard, 70 and 10%.

The following net prices per foot of leather belting are computed at the above discounts. The price of rubber belting is as stated, unchanged from last month, and the prices may be found on page 119 in the issue of Sept. 7.

LEATHER BELTING, PRICE PER FOOT.

Width, ins.	Extra heavy.	Medium	Standard.
1	$0.095	$0.072	$0.065
1½.......	.144	.108	.097
2	.192	.144	.12
2½.......	.24	.18	.162
3	.29	.215	.194
3½.......	.35	.252	.227
4	.385	.29	.26
5	.48	.36	.325
6	.58	.433	.39
7	.68	.50	.455
8	.77	.58	.52
9	.86	.65	.58
10	.96	.72	.65
11	1.05	.79	.71
12	1.15	.87	.78
14	1.35	1.01	.91
16	1.53	1.15	1.03
18	1.73	1.30	1.17
20	1.93	1.45	1.30
22	2.10	1.58	1.42
24	2.30	1.73	1.55
26	2.50	1.88	1.69
30	2.87	2.16	1.95
36	3.97	2.60	2.34
48	4.62	3.48	3.10

Chain Belting.—Prices are without change and the demand is fair.

From 3 HP. to 10 HP. 30-in. centers complete, with two sprockets, $7 to $8 per HP.; from 10 HP. to 25 HP., 36-in. centers complete, $5 to $6 per HP.; from 25 HP. to 100 HP., 60-in. centers complete, $4 to $5 per HP.; from 100 HP. to 500 HP., 72-in. centers complete, $3 to $4 per HP.

Packing.—The demand is good. Prices continue unchanged for original packages in small lots.

Asbestos wick and rope, 13 cts.; sheet rubber, 11 to 13 cts.; pure gum rubber, 40 to 45 cts.; red sheet, 40 to 50 cts. Cotton packing can be had at 16 to 25 cts.; jute at 3¼ to 3½ cts., and Russian at 9 to 10 cts.

Lubricating Oils.—Quotations continue without change, the following figures being named for 5-bbl. lots:

	Cts. per gal.
*Cylinder, dark	20 to 27
*Cylinder, steam, refined.......	14 to 22
Neutral Oils, filtered:	
Stainless white, 32 to 34 gravity	28 to 29
Lemons, 33 to 34 gravity.......	17 to 19
Dark, 32 gravity...............	15 to 18
Crank Cast oil.................	15 to 17

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*Prices are according to test.

High-Speed Steel.—The demand is less than last month. Prices are without change at 50 to 75 cts. per lb.

Fire Hose.—Prices of hose are unchanged. The standard grade of underwriters' cotton rubber-lined hose, 2⅝-in. diameter, warranted, 350 lbs. pressure, is sold in 50-ft. lengths, complete with couplings, at 65 cts. per ft. Common hose, 2½-in. diameter, tested to 200 lbs. pressure, is 35 cts. per ft.

Cotton Waste.—The following prices are named on cotton waste in bales of 100 to 500 lbs.:

No. 1 White Picked Cotton Waste, 9¾ cts. per lb.; No. 3 is 8⅞ cts.; No. 1 Colored, 6½ cts.; No. 3 Colored is 5½ cts.

OILS AND PAINTS.

Petroleum Products.—The price of crude oil in bbls. as quoted by the Standard Oil Co. or its subsidiaries is unchanged as follows: Pennsylvania, Second Sand, and Tiona, $1.30; Mercer black, is 87 cts.; Corning, 77 cts.; New Castle, 84 cts.; Illinois, 65 cts.; Illinois heavy, below 30 gravity, 55 cts.; Kansas heavy, 30 cts.

In New York petroleum from tank wagon is unchanged at 6 cts. and auto naphtha and stove gasoline is likewise without change at 12¾ cts. per gal.

Fuel oil is 2.75 cts. per gal. or $1.15 per bbl. of 52 gals. in carload lots f. o. b. New York.

Spirits Turpentine.—The market in Savannah seems to be supported by the producers at around 50 cts. per gal. This is well known by the larger consumers who do not anticipate their requirements and buy only as their needs warrant. Stocks are large. Quotations in New York continue without change at 53½ to 54 cts. per gal.

Linseed Oil.—An advance of about 5 cts. per gal. was made during the month and city raw is now quoted at 92 to 93 cts. with the usual advance of 1 ct. per gal. for boiled oil. Reports are current that oil for future delivery has been sold at much lower prices. The price of flaxseed would lead to a contrary conclusion for it is now selling at $2.28 per bu. at Duluth compared with $2.30 a month ago and $1.95 two months ago.

Paints.—The demand for all kinds of paints is much below normal and this is the only reason why prices have not advanced. Prices of white lead in oil are unchanged. For lots of 500 lbs. or over, in 250 to 500-lb. kegs, 7½ cts. per lb., in 25 and 50-lb. kegs, 7¾ cts. is quoted. Red lead and litharge in bbls., half bbls. and 100-lb. kegs, is 8 cts. per lb.

Graphite paint is unchanged at $1.40 per gal.

Hydrex preservative paint is 75 cts. per gal. in bbl. lots, New York City.

Colors in oil are quoted at the following prices per lb.: Lamp black, 12 to 14 cts.; Chinese blue, 36 to 46 cts.; Prussian blue, 32 to 36 cts.; Van Dyke brown, 11 to 14 cts.; Chrome green, 12 to 16 cts.; Raw or Burnt Sienna, 12 to 15 cts.; Raw or Burnt Umber, 11 to 14 cts.

CHEMICALS.

	Cts. per lb.	
Nitric acid, 30°..........	3.87½	to 4.25
Nitric acid, 40°..........	4.50	to 4.87½
Sulphuric, 60°	0.90	to 1.00
Sulphuric, 66°	1.00	to 1.25
Sal Ammoniac, lump.....	9.25	to 9.75
do., granulated	5.87½	to 6.00
do., gray	6.00	to 6.25
Sulphur, roll	1.85	to 2.15
Sulphur, flour	2.00	to 2.40
Sulphur, flowers	2.20	to 2.60
	Per gallon.	
Alcohol, grain, U. S. proof.	$2.58 to	$2.60
Alcohol, denatured, 5-bbl. lots	.41 to	.42
Alcohol, denatured, ½-bbl.	.46 to	.47
Alcohol, wood, 95 to 97....	.52 to	.57
Alcohol, wood, purified....	.80 to	..

LINE CONSTRUCTION.

Aluminum Wire.—The inquiry is small and prices continue without change at 31 cts. per lb. base.

Poles.—Cedar poles are quoted as follows by the R. D. Dowie Pole Co., New York Block, Seattle, Wash. The price is f. o. b. loading point:

Length in ft.	Diameter at top. 8-in.	9-in.
30	$2.70	....
35	3.15	$3.50
40	3.60	4.00
45	....	4.50
50	....	5.00
55	....	5.50
60	....	7.20
65	....	9.75
70	....	10.50
75	....	11.25
80	....	12.00

Chestnut poles, f. o. b. Mechanicsville, N. Y., are quoted by T. C. Luther of that place as follows:

Length in feet.	Price each. Diameter at top. 5-in.	6-in.	7-in.
25	$1.50	$2.00	$2.75
30	2.50	2.75	3.50
35	2.75	3.25	4.25
40	3.25	4.00	5.50
45	4.00	5.50	7.50
50	5.50	7.50	9.50

Fir Cross Arms.—Prices are unchanged, as follows:

Size. 3¼ × 4-in.	Price per arm in cts. Pacific Coast.	Chicago.	New York.
3 ft., 2-pin......	8	13½	15½
4 ft., 2-pin......	11	18½	21
5 ft., 4-pin......	16	26½	28½
6 ft., 4 and 6-pin.	20½	31½	36
8 ft., 6 and 8-pin.	28	42	48½
10 ft., 8, 10 and 12-pin	37	55½	67½

Telegraph Wire.—For lots of fair size, the wire measured in Birmingham wire gage, the prices in cts., per lb., are as follows: "Extra Best Best," Nos. 6 to 9, 4⅝ cts.; Nos. 10 and 11, 4½ cts.; No. 12, 4⅝ cts.; No. 14, 5⅛ cts. "Best Best," Nos. 6 to 9, 3½ cts.; Nos. 10 and 11, 3⅝ cts.; No. 12, 3½ cts.; No. 14, 4 cts. Actual freight is allowed from Trenton, N. J., where it does not exceed 25 cts. per 100 lbs.

Insulators. — Prices are without change. Glass insulators in lots of more than 1,000 and less than 10,000 are sold at the following prices per 1,000: Double petticoat, 20 oz., $33; Western Union, $30.25; No. 2 cable, $53.90; No. 4 cable, $210; Muncie type, 7-in., $236.50; No. 3 triple petticoat, 4½-in., $90.75.

Copper Wire.—The low price of wire as well as the increase in business by the public service corporations has stimulated some new business. Prices are without change at 14 cts. base.

METALS.

Copper.—The prices of copper are lower than a month ago and sales have been made at 12.25 cts. New York for electrolytic. This, however, has been the extreme price and most of the sales of the month have been at higher figures. The activity was fair, probably as much business being transacted as usual, but the market was very narrow. One of the influencing factors in the decline has been the unrest in Europe and it is believed that the large takings of copper, which have been so prevalent for the last three years from European interests, may soon be curtailed. At the same time, there seems to be little prospect that American business could pick up sufficiently to make good the deficit caused by the slump in the European takings. The report of the Copper Producers' Association for August was favorable to holders of metal, but this is not surprising as the country always consumes more copper in the last six months of the year than in the first six months. The exports of copper are not as large as a month ago, the total shipments for the first twenty-seven days of the month being about 21,000 tons. Lake Copper is in small demand at 12.50 cts.

Pig Tin.—The price fluctuates within rather wide limits compared with those ruling the last three years, but more like the old quotations which prevailed previous to 1907. During the last week tin has sold down as low as 37.50 cts. and it has advanced to 38.50 cts. A matter of considerable interest is the Banca auction sale, which went at the relatively high figure of 39.30 cts. c. i. f. New York when the market for spot in New York was about 37.87½ cts. This unusual price leads to the belief that some London speculators have been trying to force the market down and were made to pay for their trouble. In the local market consumers are not anxious buyers, yet at the same time they supply their wants as needed from day to day. Arrivals during the month have been large, amounting to 52,030 tons, and there are afloat for American ports about 1,000 tons.

Lead.—The price of lead dropped sharply and sales of lead have been made by independent producers at 4.47½ cts., while the American Smelting & Refining Co. continues to quote 4.50 cts. In the West, the nominal asking price is 4.32½ cts., but this has been shaded in several instances.

Specialties are quoted as follows:

	Per lb.
Sheet lead:	
Large lots	6.25 cts.
Small lots	6.75 cts.
Lead Pipe:	
Large lots	5.75 cts.
Small lots	6.40 cts.

Spelter.—The market is lower and sales have been made in New York at 6 cts. for spot delivery, while in the West 5.85 cts. is asked for St. Louis delivery. Stocks are not large and in consequence the price sometimes fluctuates widely on an order for prompt shipment.

Roofing Copper.—The demand is fairly good and prices are steady and unchanged at 16 to 16½ cts.

Miscellaneous Metals.—Small lots of metal and metal products can be obtained from jobbers' stores, New York, at the following prices:

	Per lb.
Bismuth	$2.25
Brass tubes, iron pipe sizes:	
½-in.	.19
¾ to 3-in.	.18
3½-in.	.19
4-in.	.20
Brass sheets	.14¼
Brass, rods	.14¼
Solder, ½ and ½ guaranteed	.27½
Zinc, sheets	.08½
Manganese bronze rods	.16
Manganese bronze in crucible form	.14
Monel metal, ingot	.16

Old Metals.—Miscellaneous lots of scrap metal, amounting to about a ton, can be sold to dealers in New York at about the following prices:

	Cents.
Copper, heavy & crucible	10.75 to 11.00
Copper, heavy and wire	10.50 to 10.75
Copper, light and bottoms	9.50 to 9.75
Brass, heavy	7.00 to 7.25
Brass, light	5.50 to 5.75
Heavy, mach. composition	9.25 to 9.50
Clean brass turnings	7.00 to 7.25
Composition turnings	8.25 to 8.50
Lead, heavy	....to 3.75
Lead, tea	....to 3.50
Zinc, scrap	....to 4.00

MISCELLANEOUS.

Waterproofing.—The prices for carload lots, f. o. b. cars New York, are as follows: Hydrex waterproofing felt, $1.25 per 100 sq. ft.; Hydrex compound "A," 26 cts. per gal.; Hydrex compound "B," 18 cts. per gallon.

Texaco waterproofing cement is $30 per ton in car lots, f. o. b. cars New York or Philadelphia.

Asphaltum for waterproofing is sold at $26 to $27 per net ton.

Glidden, graphite acid proof coating is sold at $1.25 per gal. in bbls and ½ bbls., and $1.40 per gal. in 5-gal. cans. These prices are f. o. b. Cleveland or for delivery from warehouse, New York, Chicago, St. Louis, Boston or Atlanta.

Roofing Slate.—Prices are steady and unchanged but trade is dull. Quotations are named per "square" or 100 sq. ft. of roof surface in carload lots of the sizes in most general use, f. o. b. quarry station:

	Prices per 100 sq. ft.
Vermont, sea green	$3.50 to $4.10
Pennsylvania, Bangor Ribbon	3.50 to 4.00
Maine, Brownsville No. 1	5.00 to 7.75
Maine, Brownsville No. 2	4.50 to 6.00
No. 1 Red	10.50 to 12.00
Unfading Green	4.00 to 5.50
Genuine Bangor	4.00 to 6.50
Pen Argyle	4.00 to 5.50

Rope.—Prices are without change but the market is steady.

Pure Manila is 8½ to 9 cts. per lb.; second grade, 7½ to 8 cts.; hardware grades, 7 to 7½cts. per lb. Pure Sisal is 6½ cts. for the highest grades, and 6 cts. for less desirable grades. Jute rope in commercial sizes is 6 to 6½ cts. per lb.

Explosives.—Dynamite of the kind usually used by contractors is approximately 11 to 13 cts. per lb., f. o. b. factory, in ton lots. Blasting powder, classified as "soda" grade, is sold at $1.20 to $1.40 per keg, of 25 lbs. in lots of 10,000 lbs. The following prices prevail on Trojan in carload lots, minimum 24,000 lbs., f. o. b. Pacific Coast points: No. 1, 13½ cts.; No. 2, 10½ cts.; No. 3, 10 cts. They have a disruptive force equivalent to 60%, 40% and 30% of nitro-glycerine.

Exploders, per hundred, are sold at the following prices: 4 ft., $3.60; 6 ft., $4.10; 8 ft., $4.60; 10 ft., $5.10; 12 ft., $5.60; 16 ft., $6.60; 20 ft., $7.50; 20 ft., $9.40; 30 ft., $12; 36 ft., $14.60.

Caps in lots of 10,000 are $7 to $8 per thousand.

Blasting machines for 10 holes are $12; 25 holes, $20; 50 holes, $40; 100 holes, $60.

Roofing Cement.—Prices are unchanged at $25 per ton for Texaco.

Rubber.—Prices show only a slight change from last month. The largest consumers are only buying as their needs warrant, but consumption is large. The makers of automobile tires will require more material another year but they have been buying the cheaper grades which, in a large measure, accounts for the relative ease of the higher priced grades. In all parts of the world where rubber can be profitably cultivated agriculturists are turning their attention to it. The recent advance in coffee is, in a measure, due to efforts to cultivate rubber on land that formerly produced coffee. Quotations are as follows: Up River Para, fine, $1.14 to $1.18; up River Para, coarse, 96 to 98 cts.; Caucho ball, 95 to 96 cts.; Guayule, 44 to 46 cts. African rubbers are unchanged at [illegible] to 96 cts. for Massai red; 75 to 76 cts. for Pinky and 56 to 58 cts. for Nigge[illegible]

Asbestos.—Asbestos building felt and sheathing in less than ton lots is 3½ cts. per lb. for the light, weighing from 6 to 30 lbs. per 100 sq. ft.; 4 cts. per lb. is charged for the heavy, weighing from 45 to 56 lbs. per 100 sq. ft.

Millboard is made in standard sheets, 40 × 40 ins., and 41 × 40 ins. It varies in thickness from 1/32 to ½ in. and in weight from 2 to 27 lbs. per sheet. The net price in 100-lb. lots is 5 cts. per lb.

Transite, asbestos wood, used for fireproofing, ventilators and smoke jacks, comes in standard sheets 48, 36 x 48 ins., 42 x 48 ins., and 42 x 36 ins. The prices, f. o. b. factory, Nassau, N. H., are as folows:

Thickness.	Weight.	Price
⅛-inch	1 lb.	$0.08
3/16-inch	1½ lbs.	.12
¼-inch	2 lbs.	.16
5/16-inch	2½ lbs.	.20
⅜-inch	3 lbs.	.28
7/16-inch	3½ lbs.	.28
½-inch	5 lbs.	.32
9/16-inch	4½ lbs.	.36
⅝-inch	5 lbs.	.40
¾-inch	6 lbs.	.44
⅞-inch	7 lbs.	.48
1-inch	8 lbs.	.52
1¼-inch	10 lbs.	.56
1½-inch	12 lbs.	.64
1¾-inch	16 lbs.	.72
2-inch	16 lbs.	.80

Paper.—Prices are unchanged from last month, as follows:

Tarred Paper:	Per roll of 100 sq. ft.
Standard, 2-ply, 40 lbs	$0.40 to $0.4[illegible]
Extra heavy, 2-ply, 45 lbs	.50 to .55
Standard, 3-ply, 60 lbs	.60 to .65
Extra heavy, 3-ply, 70 lbs	.70 to .75

Rosin, Sized Sheathing:	Per roll of 500 sq. ft.
Light, 25 lbs	$0.38
Medium, 30 lbs	.45
Heavy, 40 lbs	.60

Lighterage Limits.—The free delivery or "Lighterage Limits" in New York City are as follows: In Manhattan, from a point opposite the Fort Lee ferry, south along the Hudson River around the Battery and north along the East and Harlem Rivers to the Jerome Ave. Bridge at 155th St. In New Jersay, south from Fort Lee ferry to Bayonne City, points on the north and east shore at Staten Island, between Bridge Creek (Arlington) and Clifton, both inclusive, and including Elm Park, Eristina and Shooters Island. In Brookyn, from 69th St., Bay Ridge, north to Port Cove, Astoria, Long Island City.

TRADE PUBLICATIONS.

(Continued from Page 164.)

LUBRICATING OIL.—Texas Co., 17 Battery Place, New York City. Quarterly magazine. Paper; 5½ × 8½ ins.; pp. 11; no illustrations.

This is the first issue of a magazine entitled "Lubrication," which is to be published quarterly, it is announced, for the purpose of calling attention to the saving which may be effected by a careful investigation of the lubrication problem and in particular to show the value of "Texaco" lubricating oils. The material in the first issue includes an article on the performance of the U. S. Battleship "Delaware," reprinted from the "Journal of the American Society of Naval Engineers," and reports of a number of tests of Texaco oils on engine bearings and rolling mills and in cutting threads on pipes.

SPECIFICATIONS FOR WATERPROOFING. — Trussed Concrete Steel Co., Detroit, Mich. Paper; 5¼ × 7¾ ins.; pp. 24; illustrated.

These specifications include waterproofing cement stucco, waterproofing mass concrete by the integral method, waterproofing concrete and general masonry by a waterproofed plaster coat, waterproofing buildings by the membrane method, dampproofing exposed walls by use of "Trus-con" plaster bond, and specifications for the use of other patent processes of this company. "Trus-con," the material to be employed under all the above specifications, is a patented waterproofing paste which is added to a dry-mixed concrete in the proportion of one part paste to 12 parts of water until the mixture is of a medium wet consistency.

ROAD ROLLERS.—Austin Mfg. Co., Chicago, Ill. Paper; 11 × 7½ ins.; pp. 88; illustrated.

The first 20 pages of this catalog cover in detail the construction of the Austin gasoline motor road roller, which was first put on the market in 1906, and is now made in sizes of 7, 8, 10, 12 and 15-tons. The remainder of the catalog consists of a large number of illustrations of its use under a variety of conditions.

WATER-WORKS VALES.—Rensselaer Valve Co., Troy, N. Y. Imitation morocco; 9 × 5¾ ins.; pp. 210; illustrated.

The catalog covers a wide range of valves for every purpose in steam and hydraulic construction, and will prove a useful addition to the engineer's library. Gate valves are made in standard sizes up to 84 ins. diameter. A special product of this firm is an improved balanced swing gate check valve. Automatic cluster air valves for steel pipe lines are another interesting product here described. These valves are designed to automatically prevent the collapse of riveted and lock-jointed steel pipe lines from external pressure by allowing air into the pipe and preventing a vacuum. They also automatically allow the air to escape when the pipe is filled. Other styles of automatic valves and a great variety of hydrants are also described.

MESTA MACHINE CO.—Description of plant and schedule of inspection trip by the American Society of Mechanical Engineers and the Engineers' Society of Western Pennsylvania, Friday, June 2, 1911. West Homestead, Pa. Paper; 5¼ × 7¼ ins.; pp. 32; illustrated; 2-page photograph of members.

Perhaps the most popular excursion in connection with the June meeting of the American Society of Mechanical Engineers of Pittsburgh was that to the fine new works of the Mesta Machine Co., at West Homestead. A booklet was given by the company to the visitors containing the schedule for the inspection trip through the works, with a brief description of the works and their products. A new edition of this booklet has now been prepared containing as an inset a reproduction of the photograph taken of the visiting members of the societies, grouped around the main entrance of the works on their arrival.

WATER PURIFICATION APPARATUS.—American Electric Water Purifying Machine Co., 200 Fifth Ave., New York City. Paper; 6 × 9 ins.; pp. 33.

Under the guise of "electrical purification," this catalog sets forth information and testimonials relating to a system of water treatment which appears to be substantially mechanical filtration with an electrically prepared coagulant. To prepare the coagulant, an electric current is passed through a series of aluminum electrodes placed in small connecting water compartments. The water being treated passes from these compartments to a small central cylinder called a "gas chamber," and from this chamber it passes in turn to mechanical filters. The manufacturers claim that the electric current and electrodes cause a partial dissociation of the water into nascent hydrogen and oxygen, while at the same time the electrodes throw off aluminum hydroxide. It is stated that the oxygen "energetically destroys all lower forms of animal and vegetable life," while the aluminum hydroxide acts as a precipitant.

For other Proposal Advertisements see pages

57, 58, 60, 61, 62, 64

of Advertisements and Construction News, page 168

STEEL HIGHWAY BRIDGE.

Hartford, Conn., October 3, 1911.

Sealed proposals will be received by the Board of Park Commissioners at their office, 49 Pearl Street, Hartford, Conn., up to 4 o'clock P. M. of the 18th day of October, 1911, for removing the present bridge over Park River, building new bridge, and other work incidental thereto, in (West) Bushnell Park. The new bridge will consist of one 50 and two 26-foot plate-girder spans.

Plans and specifications may be seen and blank forms of proposal obtained at the office of the City Engineer after October the 6th.

Each proposal must be accompanied by a certified check for $500 made payable to the City Treasurer of the City of Hartford, and a satisfactory surety bond of 50% of the contract price will be required of the successful bidder.

The right is reserved to reject any or all bids not deemed to the interest of the City.

BOARD OF PARK COMMISSIONERS.
By FRANKLIN G. WHITMORE,
Secretary.

TREASURY DEPARTMENT, Office of the Supervising Architect, Washington, D. C., September 26, 1911.—Sealed proposals will be received in this office until 3 o'clock P. M. on the 23rd day of October, 1911, and then opened for the mechanical equipment (except elevator) of the United States Post Office at Bellingham, Wash., in accordance with drawings and specification, copies of which may be obtained at the office of the superintendent of construction at Bellingham, Wash., or at this office, at the discretion of the Supervising Architect. JAMES KNOX TAYLOR, Supervising Architect.

U. S. ENGINEER OFFICE, Room 405 Custom House, San Francisco, Cal., Sept. 27, 1911.—Sealed proposals for constructing two steel hull 20-inch pump dredges, "Sacramento" and "San Joaquin," will be received here until 12 noon, Dec. 27, 1911, and then publicly opened. Information on application. S. A. CHENEY, Maj., Engrs.

UNITED STATES ENGINEER OFFICE, Vicksburg, Miss., Sept. 29, 1911.—Sealed proposals for furnishing and placing lock gates and building dam for Lock and Dam No. 6, Ouachita River, near Roland Reit, Ark., will be received here until 12 M., Oct. 31, 1911, and then publicly opened. Information on application. J. A. WOODRUFF, Capt. Engineers.

Reinhardt's
TECHNIC OF MECHANICAL DRAFTING
Shows how to do it right Price, $1.00